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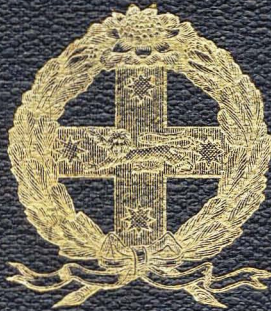
The

Official Year Book

of

New South Wales.

1907-8.



J. B. TRIVETT.

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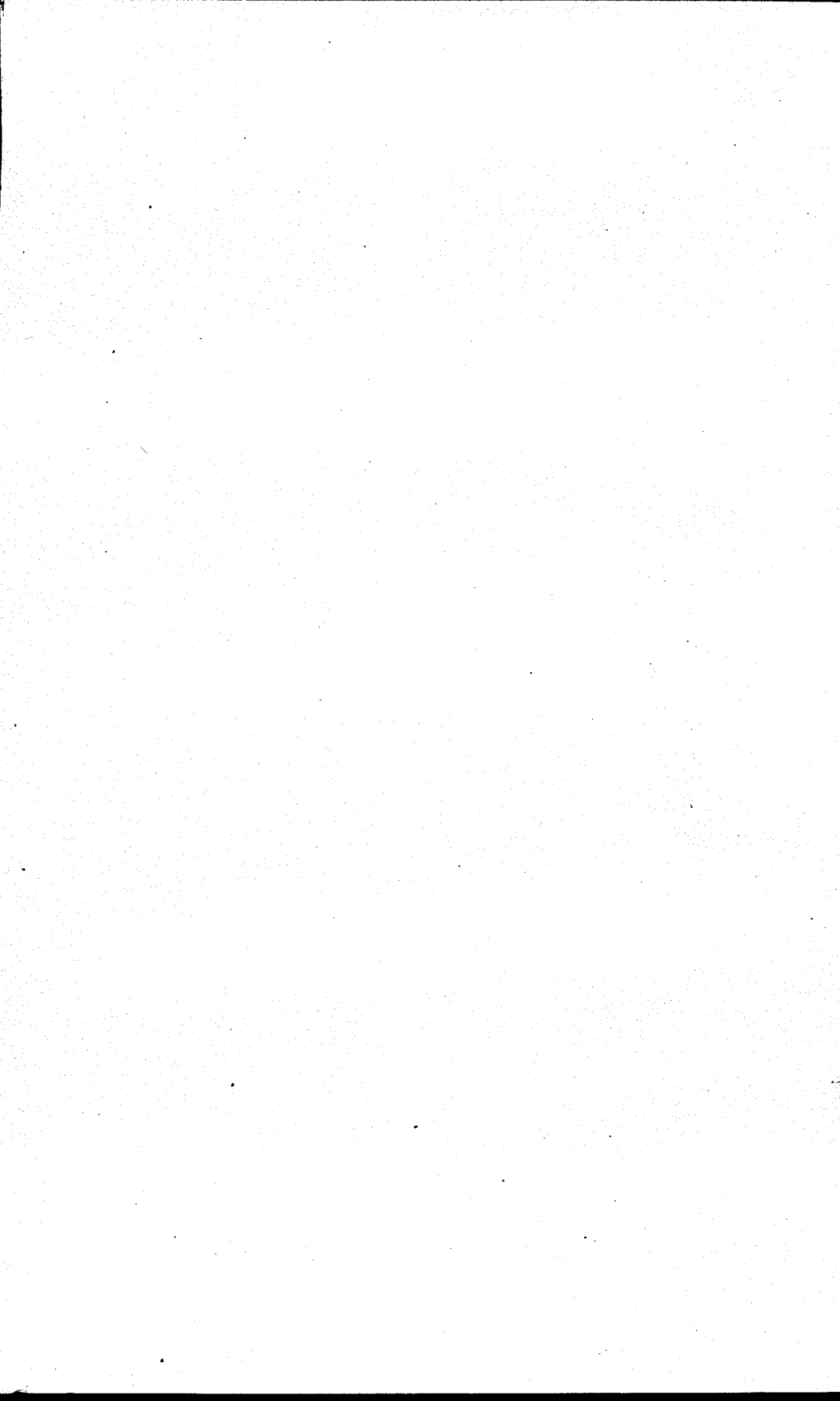
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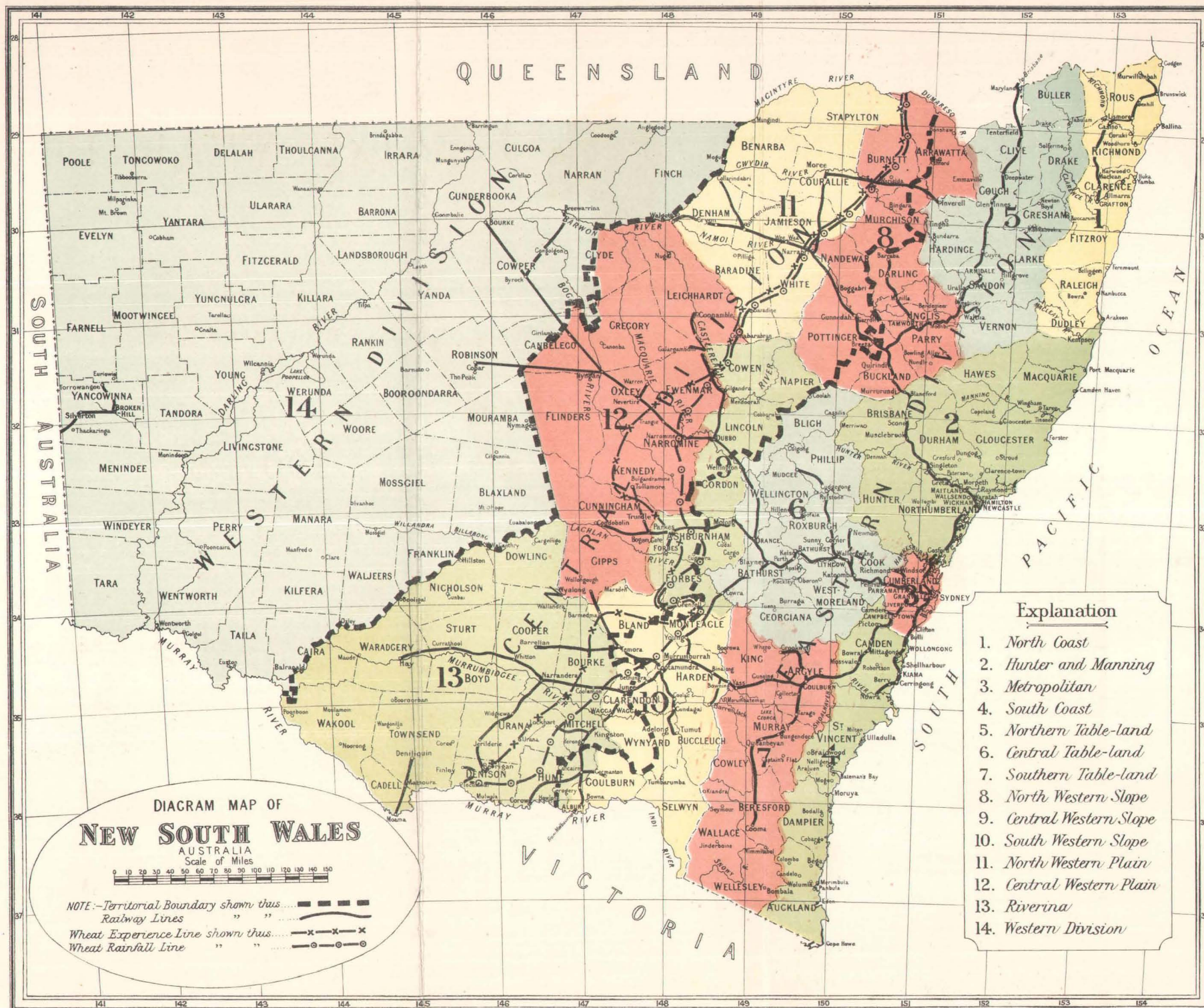
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THE  
OFFICIAL YEAR BOOK  
OF  
NEW SOUTH WALES  
1907-8

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JOHN B. TRIVETT, F.R.A.S., F.S.S.  
(GOVERNMENT STATISTICIAN).

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PUBLISHED BY AUTHORITY OF THE GOVERNMENT OF THE  
STATE OF NEW SOUTH WALES.

W. A. GULLICK, GOVERNMENT PRINTER.

1909

THE UNIVERSITY OF CHICAGO

PHILIP ALAN BRUCE

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## PREFACE.

IN preparing this, the third, issue of the Official Year Book of New South Wales, the utilitarian aspect of the publication has received most attention ; the needs of a people almost universally occupied in the serious duty of making a livelihood have been kept steadily in view ; the information most valuable to those who require guidance in their pursuit of the material affairs of life has been carefully garnered ; and valuable data have been sought and presented relating to the many and varied potentialities and developmental industries of the State.

Much of the letterpress of previous issues has been excised, especially that relating to matters which should rather be discussed in standard works of reference, or which treat of technical subjects, or which are of purely scientific interest ; and the sole object contemplated has been the production of an everyday book for everyday men.

The course thus adopted will enable readers who have a repugnance for simple tables of figures, or who may be unable readily to deduce for themselves the morals underlying mere statistical abstracts, to grasp the true condition of affairs in any or all of the chapters treating of the multifarious interests or developments of our civilisation.

Special attention has been given to statistics indicative of the outcome of State legislation of recent years, thus enabling the student to obtain immediate information as to the tendency and ultimate effect of tentative measures, or as to the solution of current problems of political economy. Amongst the chapters dealing with such matters are those touching upon Land Settlement, Mining, Arbitration, and Local Government.

I have to express my acknowledgment of the hearty and painstaking co-operation evinced by the officers of the Department to whom the various duties in the production of the volume have been entrusted, and notably would mention Mr. H. A. Smith, F.S.S. (Chief Assistant), and Miss M. C. Ryan.

Friendly criticism as to any shortcomings, or notification of any undiscovered inaccuracies, will be regarded as a kindness.

JOHN B. TRIVETT,

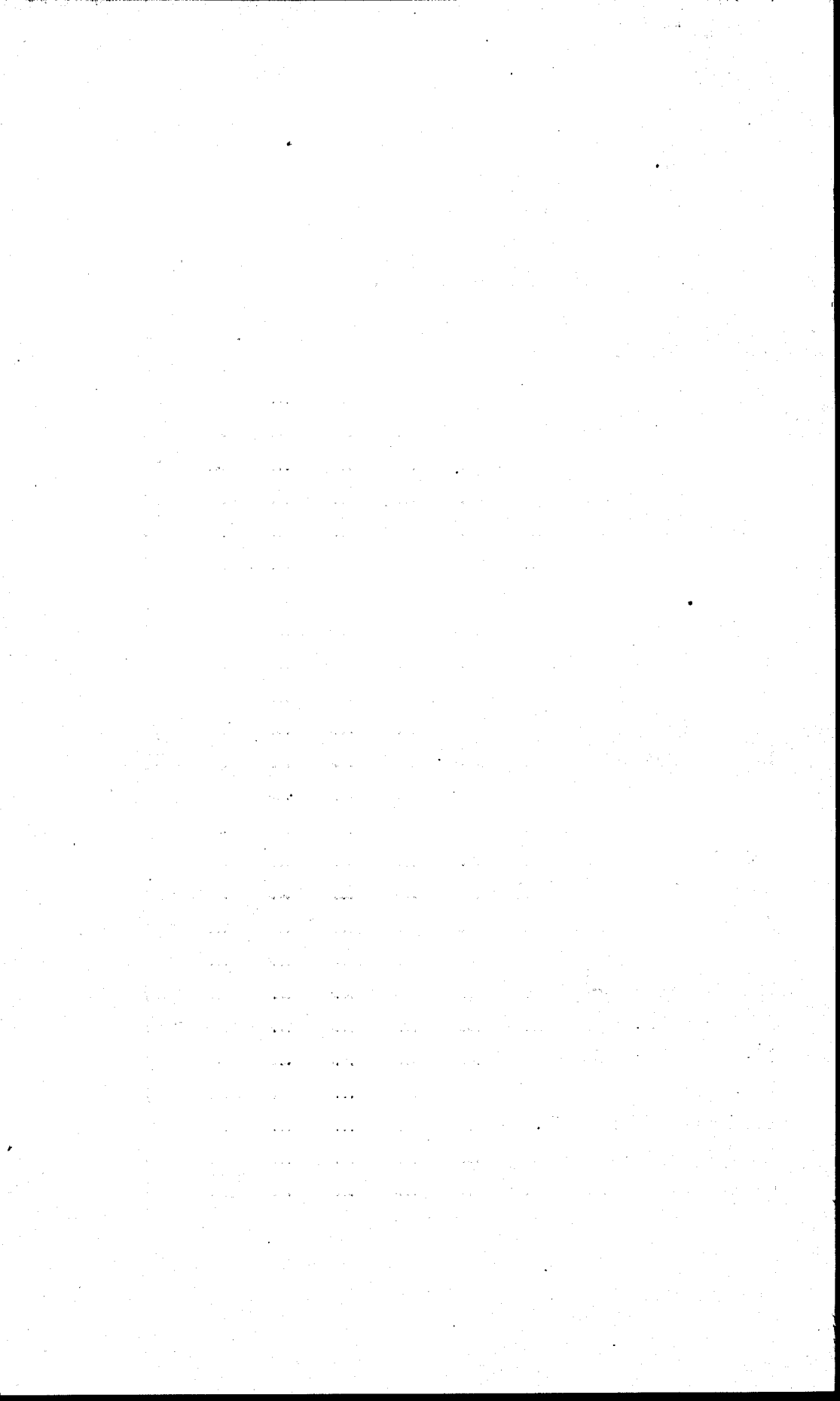
*Bureau of Statistics,*

*Government Statistician.*

*May, 1909.*

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## HISTORICAL SKETCH.

**I**T is impossible to say who were the first discoverers of Australia, although French, Portuguese, Spanish, and Dutch navigators, in turn, laid claim to being the first to sight the great southern land, traditionally known as "Terra Australis."

The great voyage of James Cook, in 1769-70, was undertaken, primarily, for the purpose of observing the transit of Venus, but he was also expressly commissioned to ascertain "whether the unexplored part of the Southern Hemisphere be only an immense mass of water, or contain another continent." The vessel fitted out for the voyage was a small craft of 320 tons, carrying twenty-two guns, and built originally for the coal service, with a view rather to strength than to speed. Chosen by Cook himself, she was renamed the "Endeavour," in allusion to the great work which her commander was setting out to achieve. Mr. Charles Green was commissioned to conduct the astronomical observations, and Sir Joseph Banks and Dr. Solander were appointed botanists to the expedition. After successfully observing the transit from the island of Tahiti, or Otaheite, as Cook wrote it, the "Endeavour's" head was turned south, and then north-west, beating about the Pacific in search of the eastern coast of the great continent whose western shores had been so long known to the Dutch. Circumnavigating and minutely surveying New Zealand, Cook then stood due west, in order to carry out the instructions given him.

After a voyage of nearly three weeks, Cook, on the 19th April, 1770, sighted the eastern coast of Australia, but the first important point observed was a bare and sandy headland, to which he gave the name of Cape Howe. After passing and naming Mount Dromedary, the Pigeon House, Point Upright, Cape St. George, and Red Point, Botany Bay was discovered on the 28th April, 1770, and as it appeared to offer a suitable anchorage, the "Endeavour" entered the bay and dropped anchor.

While in the bay the ceremony was performed of hoisting the Union Jack, first on the south shore, and then near the north head, formal possession of the territory thus being taken for the British Crown.

After leaving Botany Bay, Cook sailed northward. He saw and named Port Jackson, but forbore to enter the finest natural harbour in Australia. Broken Bay and other inlets, and several headlands, were also seen and named, but the vessel did not come to an anchor until Moreton Bay was reached. Still sailing north and having completed the survey of the east coast, to which he gave the name of New South Wales, Cook sighted and named Cape York, the northernmost point of Australia, and took final possession of his discoveries from latitude 38° south northward to latitude 10½° south, on a spot which he named Possession Island, thence returning to England by way of Torres Straits and the Indian Ocean.

The favourable reports brought to England by the "Endeavour" on her return, and the graphic account of his voyage published by Cook, together with the fact that Great Britain had just lost her North American colonies by their successful rebellion, turned all eyes to Australia, or New Holland, as it was then called. The difficulty of disposing of their criminal population was only one of the causes which determined the Government of the day to found the colony of New South Wales; for all concerned felt they were engaged in founding a new home in the Southern Hemisphere for

the British people, and visions of even greater progress than has yet been attained filled the minds, not only of Viscount Sydney and Governor Phillip, but also of many reflecting persons in the colony itself. The truth of this view is amply demonstrated by the testimony of several contemporary writers.

It was in the early part of 1787 that Viscount Sydney, Secretary of State for the Colonies, determined to plant a colony in New South Wales, and by May of that year the First Fleet had been assembled. It consisted of the 20-gun frigate "Sirius," the armed tender "Supply," three store-ships—the "Golden Grove," "Fishburn," and "Borrardale"; and six transports—the "Alexander," "Scarborough," "Lady Penrhyn," "Prince of Wales," "Friendship," and "Charlotte." The largest of these vessels measured only 450 tons, and the smallest was no more than 270 tons. On board the six transports were packed, according to the statement made by Collins in his history, no fewer than 564 men and 192 women, all prisoners who had been sentenced to expatriation. There were also carried 168 marines and 10 officers, commissioned and non-commissioned. These, with 5 medical men, a few mechanics, and 40 women—wives of marines—together with 13 children—the offspring of the convicts—made up the total number of persons despatched to found the colony. Captain Phillip, R.N., was placed in command of the expedition, and given a commission as Governor and Captain-General of New South Wales. The fleet sailed in May, 1787, and after calling at Rio Janeiro, arrived in Botany Bay in the beginning of January, 1788.

1788-1806.

Governor Phillip was not long in discovering that Botany Bay was by no means an ideal spot for a settlement. The harbour was shallow, and insufficiently protected from adverse winds; the rich soil and beautiful meadows alluded to by Cook and Banks could not be found, while there was a very scanty supply of fresh water. Phillip, thereupon, with a small party, proceeded in a rowing boat to explore Port Jackson, and so impressed was he with the capabilities of this magnificent harbour, that he immediately determined on removing the settlement thither, choosing for its site the shores of a little inlet which he named Sydney Cove. The ships were therefore brought round as soon as possible, and on the memorable 26th January, 1788, formal possession was taken of Sydney Cove, although the proclamation of the colony and the reading of the Governor's Commission did not take place until the 7th February.

While the fleet was still in Botany Bay, two French vessels, the "Boussole" and the "Astrolabe," put in to refit. La Pérouse, the commander of the expedition, had been sent out on a voyage of discovery by the French Government.

From the very outset the infant colony was beset by grave difficulties. When the work of clearing the woods and providing quarters and hospital accommodation was taken in hand, it was found that there were very few capable mechanics amongst either soldiers or prisoners. Many of the latter were lazy, and a large number were in poor health, while there was much quarrelling among the officers. After the soil had been got ready for tillage, it was discovered that no one had any practical acquaintance with farming. Some of the sheep and cattle died, others strayed away and were lost in the bush. Major Ross, the second in command, declared that, "It will be cheaper to feed the convicts on turtle and venison at the 'London Tavern' than be at the expense of sending them here."

Despite all the worries, Governor Phillip never lost heart, but struggled on bravely. It was his aim to make the new colony, as far as possible,

independent of outside supplies; so that, when the land at Farm Cove proved unsuitable for agriculture, he lost no time in seeking elsewhere, and good land was discovered at Parramatta. A branch settlement was formed at Norfolk Island, under Lieutenant King, in February, 1788.

It had been arranged, prior to leaving England, that the colony should never be left for more than a year without replenishing the stores. In accordance with this arrangement, the "Guardian," transport, had been despatched from England with supplies in August, 1789, but was wrecked near the Cape of Good Hope. To add to the distress occasioned in the colony by the non-arrival of this store-ship, a fresh batch of colonists came out in the "Lady Juliana." The "Sirius" was hurriedly despatched to the Cape of Good Hope for supplies, and returned in May, 1789, but the stock of provisions was being depleted, and famine stared the colonists in the face. In February, 1790, there was not four months' supply in the stores, even at half rations. Under the circumstances, the Governor deemed it advisable to divide the settlement, and send some of the inhabitants, with a portion of the supplies, to Norfolk Island, on board the "Sirius" and "Supply." The "Sirius" was, unfortunately, wrecked near the island, and a large quantity of stores lost. The little company was reduced to desperate straits, and had to subsist mainly on the sea-birds which nested on the island. Meanwhile, matters on the mainland were in no better case. Relief arrived, however, in June, 1790, through the advent of three store-ships. Soon afterwards, in 1791, what is known as the "Second Fleet" arrived, and consisted of one store-ship and ten transports containing prisoners. Although there were subsequent periods of scarcity, the community was never again threatened with absolute starvation.

At the close of the year 1792, Phillip resigned office and returned to England, his health having given way under the cares and anxieties of his office. During his term of administration the young colony had made substantial progress. Sydney had more than a thousand inhabitants, and Norfolk Island about 900. At the Rosehill settlement there were 2,000 people, and the agricultural industry was advancing rapidly. The valley of the Hawkesbury had been explored, and good land was found at various points along its course. Roughly speaking, the total population at the end of 1792 may be given as 5,000.

Until the arrival of a successor to Phillip, Major Grose and Captain Paterson, officers in charge of the military, administered the government of the colony. In 1795, Captain Hunter, who after the loss of the "Sirius" had gone to England, arrived as the second Governor, and with his reappearance affairs took a new turn. He brought out a number of free settlers, mostly agriculturists; and some fine alluvial land having been discovered on the banks of the Hawkesbury, farming was successfully begun, and in a short time more than 6,000 acres were under crops of wheat and maize. The attempts to introduce cattle were for a time unsuccessful; but in 1796 a herd of 60 head was discovered at the "Cow-pastures," near Camden. These were the descendants of some cattle which had strayed from the settlement several years before; and though their quality was found to have deteriorated, they proved a very welcome addition to the live stock of the settlement.

In 1800, when Captain Hunter left the colony, the population was over 6,000; attempts had been made to penetrate into the interior, although without success; the Hunter River and its coal-mines had been discovered, and the mines were being worked by a detachment of prisoners; the city of Newcastle had been founded; and the New South Wales Corps, a military body enlisted for service in the colony (the first detachments of which had arrived in 1790), formed an efficient garrison and guard over

the more refractory prisoners. During Governor Hunter's term of office, Bass and Flinders minutely examined the coast to the south of Sydney, in a small boat only 9 feet over all, and the former discovered the strait which bears his name, thus proving Tasmania to be an island, and not the southern extremity of the continent, as previously supposed.

The summer of 1798-9 was marked by one of the first recorded droughts in the history of the colony; but this was immediately succeeded in the Hawkesbury district by a disastrous flood which swept away the homes of many of the settlers, and for a time paralysed all industry in that division. The live stock in the colony in 1792 numbered only 182, but in 1800 there were 203 horses, 1,044 cattle, 6,124 sheep, and 2,182 goats. It is interesting to note that the first plough put into Australian soil was used on Macarthur's farm at Parramatta in 1795. As illustrating the value of stock in these early days, it may be stated that it was impossible to procure a horse for less than £100, while cows were sold at from £80 upwards. One of the most noteworthy events in Hunter's period of administration was the discovery of coal, in 1797. The existence of the mineral was first reported by some shipwrecked refugees who had made their way overland from Point Hicks to Sydney. At the locality where they discovered it, in the Illawarra district, the seam was so difficult of access that its exploitation was at the time regarded as impossible. In the same year, however, Lieutenant Shortland, who had gone northwards in pursuit of some runaway convicts, discovered the Hunter, or Coal River, as it was originally named, and noted the deposits of coal near its mouth. Before very long, steps were taken to utilise the discovery, and the town of Newcastle was founded. The first recorded shipment of coal from the colony was in 1801, being paid for at the rate of £2 5s. per chaldron.

As showing the disabilities in the way of transport suffered by the early colonists, it may be noted that the successful accomplishment of a voyage from England to Australia in 1799, by the "Albion," in the space of three months fifteen days was looked upon as little short of marvellous. The vessel was 86 feet long, and had a tonnage of 362.

The next Governor was Philip Gidley King, who arrived in Sydney with authority to relieve Governor Hunter, in April, 1800, but did not assume the administration till some months later.

From the talent and energy which King had displayed in the formation of the branch settlement at Norfolk Island, it was thought that he would make a successful administrator, but the rum-trade interests proved too strong for him, and he was glad to resign in 1806. To explain these it will be necessary to describe the constitution of the New South Wales Corps. This body had been specially raised for service in the colony, the officers of the King's regiments not unnaturally objecting to be sent to such a far distant settlement, where they knew they would find no intellectual occupation, and that their sole work would consist in acting as a prison guard, or, at most, in making a few raids, in reprisal for the misdeeds of the ill-used, and often sorely provoked, aborigines. As a military guard of some sort was necessary, this corp was raised, and a few enterprising spirits—many of whom had never served before—were induced to accept commissions, with the view of obtaining grants of land and making their fortunes in the colony. Unfortunately, the readiest means to this end was found in the import trade, and as rum was in great request, the officers of the New South Wales Corps became importers of that spirit in large quantities—and even set up private stills in defiance of a Government order. Governor King was specially commissioned to put a stop to the traffic, and proceeded to act with great promptitude, and his vigorous proceedings in

sending away thousands of gallons of spirits and wine created a storm of indignation among the importers, greatly embittering the officers of the New South Wales Corps against the Government.

Shortly after his arrival, King drew the attention of the Home Authorities to the lack of a circulating medium in the colony, and 4 tons of copper coin of the value of 1d. each, and total value of £550, were sent out in 1800. Each coin was issued at the rate of 2d., and it was made a penal offence to export any quantity in excess of £5 worth of this coinage. This, however, was not the first shipment of money to the colony, as £1,000 worth of dollars had been sent out in 1792. The coinage at this period was of a rather mixed description, and in November, 1800, Governor King found it necessary to issue a general order giving the denomination and rate of legal tender of the coins circulating in the colony. These were as follows:—

	£	s.	d.		£	s.	d.
A Guinea ...	1	2	0	Rupee ...	0	2	6
Half Johanna ...	2	0	0	Dutch Guilder ...	0	2	0
Gold Mohur...	1	17	6	English Shilling ...	0	1	8
Spanish Dollar ...	0	5	0	Copper Coin of 1 oz..	0	0	2
Johanna ...	4	0	0	" ½ ...	0	0	1
Ducat ...	0	9	6	" ¼ ...	0	0	½
Pagoda ...	0	8	0				

It is interesting to note that in 1801 two French vigneronns arrived in Sydney for the purpose of superintending the wine-growing industry. Progress in this direction was, however, for a long time comparatively slow.

As showing the consumption of spirits in the early days of the colony's history, it appears from a published return that during the period from 3rd November, 1799, to 31st May, 1800, no less than 36,590 gallons of spirits and 22,224 gallons of wine were imported, while the total population was only about 5,500.

During King's administration the first serious rising among the convict population took place. In 1804, a party of convicts, some 300 strong, was employed in road-making at a place called Castle Hill, between Parramatta and Windsor. Seizing a favourable opportunity they overpowered and disarmed their guards, and then marched in the direction of the Hawkesbury where they counted on gaining support from the disaffected settlers. Major Johnston, the military commander, marched against them with a mere handful of soldiers, and after a struggle of about fifteen minutes' duration the insurgents laid down their arms. The casualties amounted to 12 killed, and 6 wounded, while 26 were taken prisoners, 8 of the latter being subsequently executed.

Generally speaking, the colony may be considered to have made substantial progress during King's term of office. The settlement had emerged from its state of dependence, so far as food was concerned, on the mother country, while the beginnings of commercial enterprise in the way of wool and whale oil were noticeable. By the year 1805 the important industry of wool-growing was established firmly, and in this connection the name of Captain Macarthur stands out prominently. Although the first Spanish merinos were brought here in 1797 by Waterhouse and Kent, it is to Macarthur that the credit is due of seeing the great possibilities of the industry, and of having the courage and determination to follow it up. It was during King's administration that the birth of the Australasian Press took place in the form of the *Sydney Gazette*, first issued in 1803.

The Hawkesbury district was again devastated by floods in 1806, when 36,000 acres were submerged, and about 23,000 bushels of wheat, 60,000 of maize, and 5,000 of barley were destroyed. Seven persons lost their lives, and it was stated that the river rose 70 feet over its usual level.

1806-1821.

Governor King was succeeded in the administration by Captain Bligh, in 1806. The new Governor had already given proofs of wonderful courage and resourcefulness by his celebrated voyage after the mutiny of the "Bounty," and had greatly distinguished himself in the naval engagements at Camperdown and Copenhagen, and in connection with the mutiny at the Nore. He had been specially commissioned by the Home Government to abolish the rum traffic, which it appears had assumed such proportions that spirits were being freely used as payment for labour or goods. The Governor proceeded to deal with the business in his customary arbitrary fashion, and consequently incurred the odium of the officers of the New South Wales Corps. Matters reached a climax with the arrest of Captain Macarthur. A detailed account of the various circumstances which led up to Macarthur's apprehension cannot be given here, but it will suffice to say that the soldiers, aided by some of the civilians, did their utmost to render nugatory all Bligh's good intentions with regard to the liquor traffic. Macarthur's military friends procured his release, and this was followed by one of the most sensational episodes in the history of the colony, namely, the arrest and deposition of Governor Bligh by the soldiers under Major Johnston. The Governor was arrested in January, 1808, and was kept in prison for twelve months, when he was allowed to resume command of the "Porpoise," on promising to proceed to England. He, however, put in at Tasmania, where he was nearly captured by the military, and remained off the coasts of the colony till May, 1810. For his share in these dramatic proceedings Major Johnston was tried in England in 1811, and cashiered from the service, while Macarthur was prohibited from returning to the colony for eight years.

Governor Macquarie took over the administration on the 1st January, 1810. Prior to leaving England he had been instructed to reinstate Bligh for a period of twenty-four hours, and to rescind the orders of the interim military despotism. The first of these tasks could not be carried out, and the Governor exercised his discretion with regard to the second.

Macquarie at once entered on a vigorous public works policy. New roads and bridges were built and extensive repairs effected to those already existing, while numerous public buildings were erected. The flocks and herds of the colony at this period comprised 65,000 sheep, 21,000 cattle, and nearly 2,000 horses, and so rapidly were they increasing that an outlet was becoming imperatively necessary. Attention was therefore directed towards the possibility of finding a way over the Blue Mountains into the country beyond, and this was successfully accomplished in 1813 by Messrs. Wentworth, Lawson, and Blaxland. Prior to this several attempts had been made by other explorers such as Bass, Tench, Wilson, Caley, and Barrallier. The Governor lost no time in sending a surveyor to report on the practicability of making a road over the ranges, and the report being favourable, the work of construction was pushed forward so vigorously that, by 1815, a stream of settlement was passing westwards to the rich Bathurst Plains.

The explorations of Oxley and Hume, between 1817 and 1819, added considerably to the knowledge of the country, and, further, the known area of the colony was increased some twenty times by their efforts.

Macquarie's administration has been the subject of varied criticism. Under his public works policy he erected 250 public buildings, and built numerous roads and bridges, thus affording labour for convict and settler, and developing the resources of the colony. The name of George-street was applied to Sydney's principal thoroughfare by a General Order

of August, 1810, while many improvements were made in buildings and means of communication throughout the metropolitan area. By some people, however, he has been accused of simply lavishing the Imperial funds for his own self-glorification. Whatever view may be taken on some matters, there is no doubt that, under Macquarie's rule, the colony made substantial progress, and his departure was viewed with regret by the great bulk of the inhabitants.

#### 1821-1838.

The new Governor, Sir Thomas Brisbane, entered on his duties on the 1st December, 1821.

The recent important discoveries of good lands had been the means of attracting a considerable number of free settlers, many of whom possessed a fair amount of capital, and their advent was regarded with great satisfaction by the Government. This tide of immigration lasted throughout Governor Brisbane's term of administration.

An event of great importance in Colonial history was the creation in 1824 of a Legislative Council, consisting of "five principal officers," this body with its restricted powers forming the nucleus of the present more extensive system of self-government. Trial by jury was also instituted in 1824, the first Civil jury being empanelled on the 1st November in that year. The censorship of the Press was removed, and this liberty resulted in the issue of two newspapers, of which the chief was the *Australian*, edited by W. C. Wentworth. The old *Sydney Gazette*, which was first published in 1803, was formerly the only newspaper in the colony, and was under complete Government control.

During Governor Brisbane's period of office the exploration of the interior was vigorously pushed forward, and, in 1823 and 1824, several important areas were opened up by Stirling and Currie, Hovell and Hume, and Allan Cunningham.

Governor Brisbane was succeeded in the administration by Governor Darling, who assumed office on the 19th December, 1825.

Darling tried to rule the colony with a rod of iron, and it was not long before he found himself involved in serious difficulties. Some of his harsher measures he was foolish enough to attempt to justify in the *Sydney Gazette*, while he was most bitterly assailed in the columns of the rival papers. He then tried to interfere with the liberty of the Press by proposing legislation aimed at regulating the contents of the papers, but in this he was unsuccessful, and the struggle had not ended when he left in 1831.

Sturt's famous journey to the south-west interior was commenced in 1829. Reaching the Murrumbidgee, he followed its course until the usual swamps were met with, when the expedition took to the boats, and passing the Lachlan mouth entered the Murrumbidgee, which Sturt followed down to the sea. The return journey against the swift current was accomplished only after great privations, and when the intrepid leader reached Sydney he was blind, and did not recover his sight for some considerable time. In 1827, Allan Cunningham, in the course of an exploration to the northward, crossed the Gwydir and Dumaresq, and discovered the splendid pastoral country in the Moreton Bay district known as the Darling Downs.

Governor Bourke arrived in the colony on the 2nd December, 1831, and during the six years in which he administered the government he gained the respect and affection of all classes of the community. One of his first acts was to abolish the Government patronage to the *Sydney Gazette*, and so terminate the unseemly disputes which had harassed the administration.

of his predecessor. He lost no time in procuring more humane conditions for the convicts, and ensured greater fairness in their assignment to the settlers. Religious equality was secured in the colony by the General Church Act of 1836, which continued in force till the year 1862. Immigrants began to arrive in large numbers, under a policy of assisted immigration which was then initiated. The first vote in aid of immigration was made by the Legislative Council, at Bourke's suggestion, and the British Government doubled the amount given by the colony. Under that system the first batches of immigrants to arrive were fifty young women from an orphan school in Cork, and fifty-nine mechanics from Scotland, whom the Rev. Dr. Lang introduced for the purpose of building the Australian College. The first steps also were taken in the path of constitutional reform, but the movement did not reach its full fruition until after the arrival of Gipps.

The explorations of Sir Thomas Mitchell, undertaken during Governor Bourke's administration, added greatly to the knowledge of the interior. In 1835, Mitchell proceeded westward from Boree, near Bathurst, along the Bogan to the Darling, which he followed for 300 miles. In the following year he traced the remaining 130 miles of the Darling's course, visited the head waters of the Murray and the Murrumbidgee, and then struck off southward through the beautiful district which he named Australia Felix, and which now forms part of the State of Victoria.

#### 1838-1851.

Sir George Gipps, the ninth Governor of New South Wales, assumed office on the 24th February, 1838.

With the opening up of the splendid country round Port Phillip, a strong tide of immigration had set in towards the colony. A large number of those who came out were possessed of capital, and in the rush for land prices rose considerably. After a time they passed the margin of safety, and then the inevitable crash came, involving the ruin of the Bank of Australia and various other financial institutions. This happened in 1843; and in 1844 the Governor, in order to replenish the depleted coffers of the State, propounded a scheme under which the squatters were to be forced to purchase a certain quantity of land every year at the minimum price—a course of action which resulted in a storm of discontent.

In 1842 a Constitution Act was passed providing for a Legislative Council of thirty-six members, six of whom were Government officers, six Crown nominees, and the rest elected by the people—eighteen in New South Wales, and six in Port Phillip.

An event of great moment under the Gipps administration was the abolition of transportation to New South Wales, which was effected under an Order-in-Council passed in 1840, Tasmania and Norfolk Island being made the only convict settlements in Australia.

Sir George Gipps left the colony on the 11th July, 1846, and was succeeded on the 2nd August by Sir Charles Fitzroy, who administered the affairs of New South Wales until the 20th January, 1855.

For some years the inhabitants in the Port Phillip district had been agitating for separation from the parent settlement. The Home Authorities therefore appointed a Commission to devise a scheme for conferring self-government on the Australian colonies, and this body recommended that Port Phillip should be separated from the older colony, and be called Victoria. The necessary legislation to give effect to this proposal was passed by the New South Wales Government in the year 1851.

1851-1859.

The discovery of gold in 1851, by Edward Hargraves, exercised a most momentous effect on the destinies of the colony, and, in fact, "precipitated Australia into nationhood." The effect of the gold discoveries on the economic condition of the colony was at first disastrous. Professional men, tradesmen, agriculturists, and labourers of all classes left their usual avocations and flocked to the diggings. Ship after ship arrived in Sydney harbour laden with eager gold-seekers, and in many cases even the crews deserted and joined in the race for wealth. Prices rose prodigiously, while production was almost at a standstill. The crowds of lawless characters who gathered at the various diggings caused endless trouble as regards police arrangements, while the unsuccessful and penniless prospectors who clustered in the metropolis were also a source of much anxiety to the authorities. Later on, when the gold fever had abated somewhat, many of those who had failed to reap a sudden fortune found that wealth could be surely, if more slowly, acquired by following their ordinary employments, and it was in this spirit that the foundations of sound progress were laid.

Nothing since the introduction of wool-growing has tended so much to develop its resources, and to make so widely known the great advantages which Australia offers to the overcrowded populations of the Old World, as the discovery of gold in 1851. Since that era the country's progress has been by leaps and bounds, and Australia, which was before regarded merely as a far-off dependency of Great Britain, now takes a place amongst the nations of the world, and is in a fair way of realising the prophetic visions of future greatness which inspired its founders.

Sir Charles Fitzroy was succeeded in the Governorship by Sir William Denison on the 20th January, 1855. Towards the close of this year the Royal assent to the new Constitution was received, and the first Parliament under the new order met on the 22nd May, 1856. This Act was the basis of the right we now enjoy, and established two Legislative Chambers. The first was to consist of not less than twenty-one natural-born or naturalised subjects (four-fifths of whom were to be persons not holding any office of profit under the Crown) who were to be nominated by the Governor in the name of the Queen. The first members were to hold their seats for five years, at the expiration of which period all appointments were to be made for life. The President was to be appointed by the Crown. The Legislative Assembly was to consist of fifty-four members, the qualification for the franchise being fixed as follows:—All inhabitants of full age, being native-born or naturalised subjects of the British Crown, and not having been convicted of any crime—or, if convicted, pardoned—and having paid all rates and taxes for which they were liable, were placed in the condition precedent required for either voting or being elected to the Assembly; but they were required, in addition, to be qualified in the following respects:—As the owner of a freehold estate of £100; as a householder, lodging occupier, or leaseholder for three years at £10 per annum. To these were added boarders at £40 per annum; persons receiving £100 a year salary; and pasture-license holders for one year.

The following year was one of the most disastrous in the history of the Colony. Torrential rains had been followed in many districts by devastating floods, occasioning great loss of life and damage to property, the Hunter and Hawkesbury districts especially suffering. In addition, the "Dunbar" was wrecked at the Gap, near Sydney Heads, and out of 120 persons on board—many of them colonists returning from Europe—only one man was saved. Shortly after this, twenty-one lives were lost

in the wreck of the "Catherine Adamsen," also in the immediate vicinity of the Heads. To guard against a repetition of similar calamities, the coastal lighting was improved, and the lighthouse erected at South Head is amongst the finest in the world.

The Moreton Bay district was separated from New South Wales in 1859, and was erected into a distinct colony under the name of Queensland.

#### 1859-1872.

Sir William Denison left New South Wales on the 22nd January, 1861, and was succeeded by Sir John Young, who arrived on the 22nd March.

At the very outset of his administration the new Governor was called upon to deal with a constitutional crisis. Mr. Robertson had introduced his Land Bills for the second time, embodying the principle of free selection, which was so distasteful to the squatting interests in the Upper House. Accepted by the Lower House, the measures were rejected by the Legislative Council, and the Governor thereupon granted a dissolution of Parliament, and a general election was held. At this election the policy of the Government was supported unanimously; but the Council still proving obdurate, sufficient new members were created to swamp the opposition and carry through the proposed legislation. When the new Councillors appeared in the Chamber the old members left in a body, and as the newcomers could not be sworn in, the Council ceased to exist. A fresh body of Councillors was therefore appointed, and the Crown Lands Alienation Bill and Crown Lands Occupation Bill soon became law.

Sir John Young's period of administration terminated on the 24th December, 1867, and the new Governor, the Earl of Belmore, assumed office on the 8th January, 1868.

As the year 1870 was the anniversary of the discovery of Australia by Captain Cook, it was resolved to mark the occasion by holding an exhibition illustrative of colonial progress. Victoria, Queensland, South Australia and Tasmania contributed exhibits, and the exhibition, which was held in a fine building in Prince Alfred Park, Sydney, was in every way a great success.

#### 1872-1893.

The Earl of Belmore was succeeded in the administration by Sir Hercules Robinson, who assumed office on the 3rd June, 1872.

In 1873 the colony lost the services of one of its most distinguished politicians, in the person of Mr. W. C. Wentworth, whose death took place on the 7th May, both Houses of Parliament adjourning as a mark of respect to the deceased statesman.

It was about this time that what has been termed a "vigorous public works policy" became the order of the day, and for some fifteen years the Government continued to expend large sums of money in the construction of works and services which, in many instances, were far in advance of requirements.

In 1874 an important constitutional enactment, known as the Triennial Parliaments Bill, was placed upon the statute book, this measure fixing the duration of Parliament at three years instead of five, as was the case previously.

Sir Hercules Robinson remained in office till the 19th March, 1879, the new Governor, Lord Loftus, taking over the administration on the 4th August.

During the Loftus Administration some most important legislative enactments were passed into law. The Public Instruction Act remodelled the public educational system. Under the previous Act of 1866 the schools subsidised by the Government had been placed under the control of a Council of Education, and aid was granted to denominational schools. The Act of 1880 dissolved the Council, and placed public education under the control of a Minister of the Crown. Provision was made for compulsory education, and for the training of teachers; and State aid to denominational schools was abolished, the Act decreeing that all State education be non-sectarian.

The division of the Colony into Electoral districts had not been revised since 1858, but under the Electoral Act of 1880 the number of electorates was increased to 72 with 108 members. Provision was also made for additional representation of any electorate in accordance with increase of population.

Another important measure was the Church and School Lands Act, also passed in 1880. Lands, which in former years had been reserved for religious and educational purposes, reverted to the Crown under an Order of Council in 1833, and some of these lands were afterwards sold. The Act now passed transferred the control of the unsold lands to Parliament, and provided that the income arising therefrom was to be applied to the purposes of public instruction.

A very successful International Exhibition was opened in the early part of the Loftus administration, and had the effect of attracting considerable outside attention to the varied products of the colony. The Garden Palace, which housed the exhibits, was unfortunately destroyed by fire in the year 1882, and many valuable documents were destroyed.

The rich silver lodes in the Broken Hill district were discovered in 1883, and the Broken Hill Proprietary commenced operations two years later. For many years the field has ranked amongst the foremost silver and lead producing areas of the world.

An event which afforded striking testimony of the loyal attachment of the colonies to the homeland was the despatch in 1885 of a Contingent of troops to assist the British arms in the Soudan. The detachment left Sydney in the "Iberia" and "Australasian," on the 3rd March, amidst a scene of intense enthusiasm. Although the number of men sent was comparatively small, and took little part in actual hostilities, the incident undoubtedly was the means of arousing a new estimate of the value of the British Colonial Empire.

Public attention had for some years been directed to the large influx of Chinese, and it was felt that the time had arrived when something should be done to stop indiscriminate immigration of this character to the colony. This was, for the time being, effected by the Chinese Restriction Act of Sir Henry Parkes, which received the Royal assent on the 6th December, 1881. Under the provisions of the Act shipmasters were forbidden to carry more than a limited number of Chinese passengers to the ports of the State, while each of these immigrants had to pay a tax of £10 before being allowed to land. Stringent penalties were provided for any infraction of the law. Later on this law was supplemented by other legislation of a still more drastic character.

Lord Loftus' term of office expired on the 9th November, 1885, and his successor, Lord Carrington, took over the administration on the 12th December following.

Despite the "Chinese Restriction Act of 1881," large numbers of these aliens continued to arrive in the colony, the number who came in during 1887 being considerably over 4,000. Public indignation was so aroused by fears of a similar invasion during succeeding years that the Premier, in 1888, actually took the illegal step of forbidding the captains of two vessels to land contingents of Chinese immigrants. The owners of the vessels, however, took the matter into court, and Sir Henry Parkes was forced to give way; but on the 11th July, 1888, a further Chinese Restriction Act was passed which prohibited the carrying of more than one Chinese immigrant to every 300 tons of the vessel's burthen, and imposed a poll tax of £100. In consequence of this repressive legislation Chinese immigration fell away considerably, only seven entering the colony in 1889.

The period from 1885 to 1895 was marked by considerable disturbance in economic conditions. The vigorous public works policy previously alluded to, ceased at about the beginning of the epoch, and, in consequence, a large number of unemployed were thrown on the labour market, and wages in most trades underwent a serious decline. In addition, the numerous strikes which characterised the period also had an unhappy effect on trade and wages. Much distress was caused in the southern district in 1886-7 by a strike which involved the cessation of labour at several of the southern collieries. This was followed in 1888 by a strike of 6,000 coal-miners in the northern district. In 1890 a strike at Broken Hill led to the closing down of the silver-mines. Following on the pronouncement of the Intercolonial Labour Conference, over 40,000 men ceased work, and being joined by the draymen in the metropolis, for a time paralysed the wool trade, while the shearers' strike in the same year involved some 20,000 workers. In 1892 the Broken Hill silver-mines were laid idle for four months through a strike of the local miners. In addition to these disastrous events, the closing years of Lord Carrington's administration were marked by devastating bush fires in portions of the colony, followed by destructive floods, the northern coastal districts especially suffering in 1890 from inundations.

Lord Carrington's term of office lasted till the 1st November, 1890, and on the 15th January, 1891, he was succeeded by the Earl of Jersey.

Early in March, 1891, a Federal Convention, consisting of delegates appointed by the various Australasian Parliaments, met in Sydney and drew up a draft Constitution Bill, and although this measure at the time aroused no popular enthusiasm in the States, it nevertheless formed the basis upon which the present Constitution was constructed.

An outcome of the industrial disturbances in the years immediately preceding 1891 was the formation of a definite "Labour Party" in colonial politics, and from this time forward the influence of labour has had a marked and important effect on the trend of legislation. Successful efforts to enter Parliament had, prior to 1891, been made by professed labour candidates, but it was in this year that the first concerted action was taken by duly accredited representatives of an organised political labour party. At the general elections in June the nominees of the party entered the political arena, pledged to the support of a platform of sixteen clauses, and secured eighteen out of the fifty-two seats in the metropolitan division, also polling heavily in several others. When the time came to count heads in the ensuing Parliament it was found that there were thirty-five labour members, while over a dozen others were prepared to subscribe to their platform. Since 1891 the party has undergone considerable vicissitudes, while its platform has, from time to time, been remodelled, but it has been instrumental in securing the passage of a considerable amount of industrial legislation.

## 1893-1901.

The Earl of Jersey's governorship terminated on the 1st March, 1893, and his successor, Sir Robert Duff, assumed office on the 29th May following. It was at about this period that the series of financial disasters occurred which are generally alluded to under the designation of the Banking Crisis of 1893. The approach of this crisis had been heralded by several signs. As early as 1891 several land companies and building societies, whose business had been conducted on an unsound basis, failed to meet their obligations. In 1892; in consequence of a groundless rumour, there was a temporary run on the Savings Bank of New South Wales. In March, 1892, a fresh impetus was given to the feelings of distrust and alarm by the failure of the Mercantile Bank of Australia at Melbourne. During the course of the following month the Bank of South Australia and the New Oriental Bank failed to meet the demands made upon them. The uneasiness deepened, and all efforts to stem the gathering tide of disaster proved unavailing. On the 29th January, 1893, the Federal Bank of Australia suspended payment, followed by the Commercial Bank of Australia on the 5th April, while by the middle of May no less than thirteen out of the twenty-five banks of issue were forced to close their doors. The securities of a large number of these institutions consisted of real estate, and could not, therefore, be converted into cash at short notice, while several of them possessed large holdings of Government stock and debentures which were readily saleable only in London. The English banks hastened to the rescue, and a shipment of £900,000 in gold was despatched to the colonies from London. Valuable aid was also rendered by the Dibbs Government in New South Wales proclaiming bank-notes to be a legal tender and guaranteeing their payment for a period of about seven months, after which State assistance was no longer required. Although public confidence received a rude shock by these untoward experiences, there can be no doubt that the crisis of 1893 was in some measure a blessing in disguise, for it led to a more rigid scrutiny of their securities by both the banks and the public, while it had the effect of putting an end to the bogus institutions which deluded the public by paying interest out of capital, and by various other nefarious devices.

Fresh labour troubles occurred in 1893, culminating about the middle of the year in a general strike of the seamen engaged on the intercolonial steamers. Trade was for a time paralysed, but the employers were assisted by numerous bands of volunteer workers, and thus in the end defeated the strikers. The year 1894 saw a recrudescence of industrial disturbances, a strike of shearers in New South Wales and Queensland for a time disorganised the wool trade. Efforts were made to prevent a recurrence of these unfortunate disputes by the formation of a Board of Conciliation and Arbitration, but the scheme was unsuccessful, and it was not until some eight years later that practical legislation was passed to deal with the evil in the shape of the Industrial Arbitration Act of 1901.

The colony lost one of its foremost statesman in 1896 by the death of Sir Henry Parkes, who had been intimately connected with the destinies of New South Wales from the initiation of Responsible Government, and had been instrumental in placing some of its best legislation on the Statute Book. The deceased statesman had also been one of the chief advocates of Australian Federation.

In its completed form, the Commonwealth Constitution Bill of 1898, although essentially grounded on the Bill of 1891, nevertheless contained some very important alterations and additions, and while it was accepted

in Victoria, Tasmania, and South Australia, the result of the referendum of the 3rd June, 1898, showed that a sufficient majority had not been obtained to ensure its acceptance in the parent State. The election in 1899, at which the party led by Mr. Reid was returned to power, had been contested mainly on the Federal issue, but it was recognised that some drastic changes would have to be made in the Federal Constitution before it would be welcomed in New South Wales. The Government thereupon decided to send Mr. Reid to a conference with representatives of the other States, and commissioned him to move a series of resolutions expressing its wishes with regard to the Bill. This Conference met in Melbourne in January, 1899, and after a considerable amount of discussion, both with the Legislature of New South Wales and the representatives of the other States, the Bill was sufficiently amended to please the majority of those interested in its fate, and at a referendum in June, 1899, it was accepted in New South Wales, and shortly afterwards in all the other States, excepting Western Australia. A referendum was not taken in the last-mentioned State until the 31st July, 1900; but the Bill was passed there by the substantial majority of 25,109 votes.

The Commonwealth of Australia was inaugurated on the 1st January, 1901, and, with enumeration of the principal events up to that date, this sketch closes. All that has happened since has been considered in the light of statistics, and dealt with, as far as possible, in other parts of this volume.

## METEOROLOGY AND CLIMATE.

THE State of New South Wales lies almost entirely between the 29th and 36th parallels of south latitude, and between the 141st and 154th meridians of east longitude. Mr. H. A. Hunt, Commonwealth Meteorologist, states that the weather is chiefly determined by anticyclones or areas of high barometric pressure, in which the winds blow spirally outward from the centre or maximum. These anticyclones pass almost continuously across the face of the continent from east to west. The explanation of the existence of this high-pressure belt probably lies in the fact that this area is within the zone in which the polar and equatorial currents meet and for some time circulate before flowing north and south. The easterly movement depends on the revolution of the globe.

A general surging movement occasionally takes place in the atmosphere, sometimes towards, and sometimes from the equator. The movement causes sudden changes in the weather—heat, when the surge is to the south, and very cold weather when it moves towards the equator. Probably, these sudden displacements of the air systems are due to thermal action, resulting in expansion or contraction in the atmospheric belts to the north and south of Australia.

New South Wales is peculiarly free from cyclones, although one, occasionally, may reach the State from the north-east tropics or the Antarctic low-pressure belt which lies to the south of Australia. The monsoonal disturbances are also on rare occasions the source of cyclones.

### PREVAILING WINDS.

Generally speaking, the prevailing winds in the summer months blow from the north on the coast with an easterly tendency which extends to, and in parts beyond, the highlands, while in the western districts they usually have a westerly tendency.

In winter, the prevailing direction is westerly. Off the southern areas of the State the winds are almost due west, but proceeding northwards a southerly tendency is assumed, while on reaching latitudes north of Sydney the direction is almost due south. When they reach the north-eastern parts of the State, these winds are deflected in a westerly direction and become merged in the south-east trade winds north of latitude 30°. During the cold months of the year, Australia lies directly in the great high-pressure stream referred to elsewhere, and there appears to be an inclination for the high pressure when passing over the continent to be broken up into individual anticyclonic circulations moving contra clockwise in the southern hemisphere.

The highest barometric readings, or the deepest anticyclonic area, will be found over the centre of Australia. From this high-pressure area the currents of wind begin to flow by force of gravity to the surrounding

regions of lesser pressure, commencing at first with very light breezes flowing almost parallel to the trend of the isobar; but as they gather momentum they become more and more deflected, until on reaching the limit of the propelling force they blow nearly at right-angles to their isobars. This is more especially noticeable when they reach the south-eastern and south-western parts of the continent, for in those regions the well-known V-shaped depressions of the Antarctic low-pressure belt add their attractive inner force to the outward repelling force of the high-pressure areas. The velocity of the wind at these points is thus considerably accelerated, and hence the storms and heavy seas prevailing during the winter months off the Leeuwin, in Western Australia, and on the coast of Victoria.

If we follow the path of a current of wind from the centre of a high pressure to its destined goal, viz., the centre of a low pressure, it will be found to describe an evolute curve, or circulate spirally outwards in its early stages, while the reverse is the case in the wind-path of low-pressure or cyclonic systems, the final stages being in the form of an involute curve. In addition to these motions of the wind in high and low pressure areas, there is also a tripping one or deflection earthwards. As winter merges into spring, and spring into summer, the passing of the sun to the south of the equator causes the tropical low-pressure belt to descend polewards, and within close touch of Australia. The high-pressure belt, which in the winter months controls the weather, is likewise forced southwards, and travels over the Southern Ocean, an occasional anticyclone reaching the mainland in the latter end of spring, but very seldom in summer. With the coming southwards of this low-pressure belt, the weather is controlled during the summer months by sub-tropical conditions. The barometers on the mainland being relatively low as compared with the prevailing readings over the western, southern, and eastern ocean surrounding, a reversal of direction in wind currents takes place as compared with that experienced in winter. The depression now existing on the mainland (instead of a high pressure) is still further intensified by the action of the sun on the arid interior, and the winds immediately begin to respond to the low-pressure attractive force, and flow in from the surrounding ocean with a spiral motion. This movement must not be lost sight of, or the cause of the prevailing north-east winds on our coast, as well as the "southerly busters," will not be clearly understood.

With a high-pressure system over the Tasman Sea, another to the west of the Great Australian Bight, monsoonal or tropical low depressions covering the greater part of the mainland, and an Antarctic V-depression to the west of the Tasman Sea, the wind conditions will be as follows:—In the first place, the high pressure lying to the east of New South Wales, conforming to the laws of wind circulation in the southern hemisphere, has a northerly circulation on its western limits. As this boundary lies almost parallel to the trend of the coast-line, northerly winds are found to prevail some distance off the shore; but the circulation is weak, owing to the depleted energy in anticyclones at this time of the year (summer), and it is, therefore, necessary to look elsewhere for some other cause for the strength which prevails in the seasonal north-easters. Continued observation at Sydney shows that these winds are barely perceptible during the morning hours; in fact, up to noon the air is hot and muggy, owing to a listless veering to the north-west bringing back the reflected heat in the air from the country lying between the seaboard and the mountains. But at noon, or shortly afterwards, a decided freshening takes place, until at about 3 p.m. a moderate to fresh breeze is blowing along the seaboard. Later in the day the force of the wind relaxes, until at sundown it ceases entirely. These characteristics may recur day after

day; and if such be the case, there is a tendency for the wind to commence earlier, and die away later. If no break occurs in the weather in the shape of a "southerly buster" or a thunderstorm, the north-easter, after blowing continuously for several days, may eventually blow throughout the night. In the early morning there will be a lull, followed by a fog—the precursor of a hot day. The fog is soon dissipated by light westerly winds and blown away to sea, and the wind then veers to the N.W., gradually increases in force, and is accompanied by a rapid rise in the temperature. The thermometer may, indeed, rise as much as 10 or 20 degrees in the course of a few hours, occasionally reaching a maximum of 100 degrees and over. During the evening a thunderstorm may bring temporary relief, only to be followed by a sweltering night and a return of the north-west wind on the succeeding day. The heat conditions will probably be dissipated then by a "southerly buster," lasting possibly till morning. The "southerly buster" rarely persists for any lengthened period after sunrise during the midsummer months; but in late spring or early autumn it may last for several days.

The cause of the initial direction of the north-easters has been alluded to above; but it is in the low-pressure conditions prevailing over the interior that an explanation of their velocity is to be sought. In the early morning the barometers in that region are uniformly level; but with the rising of the sun the air becomes heated, expands, and ascends. A fall in the barometric pressure is the result, while to fill the partial void occasioned by the rising of the heated air, a current sets in from the coastal regions. This indraft to the interior gathers strength in proportion to the increase of the sun's power there, while it diminishes with the declining sun according as the inflow is sufficient to raise the inland pressure to uniformity.

But while this low pressure is fairly constant over the mainland, the anticyclone in the Great Bight is steadily moving eastward over the Southern Ocean, with its accompanying Antarctic depression in advance. When this low pressure has passed to the east of Tasmania, its vortical power is also exercised upon the northerly current blowing off the coast, with the result that the north-easter is deflected into a north-wester, and the winds are drawn from the interior across the coastal regions to supply this new attractive force. The V-depression, impinging on the high pressure to the east of it, and at the same time being compressed by the still advancing high pressure to the west, loses its former obtuse-angular formation, which finally becomes acute. A line bisecting this angle becomes one of demarcation, dividing the northerly circulation in the fore-angle from the southerly circulation in that of the rear. At the same time the entire system is, so to speak, sucked northwards by the continental depression. Hence it follows that in succession to the extremely hot north-westerly winds we experience after a very short lull a burst from the south of even greater velocity than that of the preceding currents. The thunderstorms that frequently precede or accompany the change are probably caused by the violent intermixing of these opposing currents, with their extremes of dryness and humidity, assisted in no small measure by the dust particles pervading the air generally.

#### THE SEASONS, TEMPERATURE, AND RAINFALL.

Situated as it is in the temperate zone, New South Wales has four seasons, depending on the annual march of temperature. From a meteorological point of view, these are arranged as follows:—Summer

months, December, January, and February; autumn months, March, April, and May; winter months, June, July, and August; spring months, September, October, and November.

January is the hottest and July the coldest month, and the temperature of autumn and spring represents approximately the mean of the whole year.

New South Wales may be compared favourably with any country in the world. Taking into consideration the comparatively low latitudes in which it is situated, it offers a remarkable variety of temperate climates. From Kiandra, on the Southern Tableland, to Bourke, on the Great Western Plain, its climate may be compared with that of the part of Europe from Edinburgh to Messina; but more generally it resembles that of Southern France and Italy.

The rainfall of New South Wales is both variable and capricious. Generally speaking, the wet season may be said to extend over the first six months of the year, although occasionally the most serviceable rains come in the spring. The coastal districts are subject to the heaviest falls, ranging from 30 inches in the south to 70 inches in the north. Despite their proximity to the sea, the mountain chains are not of sufficient elevation to cause any great condensation there, so that, with slight irregularities, the average rainfall gradually diminishes towards the western limits of the State, the figures ranging from a mean of about 50 inches on the seaboard to from 10 to 20 inches on the western plains.

The quantity and distribution of rainfall in New South Wales are dependent on three factors—(1) the energy present in the atmospheric systems prevailing for the time being, (2) the rate of travel of the atmospheric stream, and (3) the prevailing latitudes in which the anticyclones are moving.

The chief agencies for precipitating rainfall are also three in number, viz., Antarctic depressions, monsoonal depressions, and anticyclonic systems. Antarctic depressions are mainly responsible for the good winter rains in Riverina and on the south-western slopes. A seasonal prevalence of this type of weather would mean a shortage of rain on the coast and tablelands, and over that portion of the inland district north of the Lachlan River. A monsoonal prevalence ensures a good season inland north of the Lachlan, but not necessarily in eastern and southern areas. An anticyclonic prevalence results in good rains over coastal and tableland districts, but a shortage of moisture west of the mountains. Equal representation of all three agencies, in conjunction with the main governing features quoted in the preceding paragraph, will be followed by a good season throughout the State.

New South Wales may be divided, naturally, into four climatic divisions, each with characteristic features, namely:—The Coastal Division, the Tableland, the Western Slopes, and the Western Plains.

The Coastal Division lies between the Great Dividing Range and the sea, and is from 30 to 150 miles wide. Sydney, the capital of New South Wales, is situated on the coast, halfway between the extreme northern and southern limits of the State, in latitude 33° 51' 41" S. Its mean annual temperature is 63° Fahrenheit, corresponding with that of Barcelona in Spain, in latitude 41° 22' N., and Toulon in France, in latitude 43° 7' N. The range is only 17°, calculated over a period of forty-nine years, the mean summer temperature being about 71°, and the mean winter temperature 54°. At Naples, which has about the same mean temperature as Sydney, the range is 27°, between the means 74° and 47°.

The following table shows the average monthly meteorological conditions of Sydney during each month, based on the experience of the forty-nine years ended 1907 :—

Month.	Average Reading of Standard Barometer at 9 in. corrected to 32° Feh. and to mean sea level.	Temperature (in shade).			Rainfall.			
		Mean Standard.	Average Reading of Maximum Thermometer.	Average Reading of Minimum Thermometer.	Average Monthly.	Greatest Monthly.	Least Monthly.	Average number of days Rain.
January ... ..	29·928	71·5	78·2	64·8	3·481	10·489	0·419	14·1
February.. ..	29·983	71·1	77·2	64·8	4·674	18·556	0·344	13·8
March .. ..	30·063	69·2	75·4	63·0	5·218	18·700	0·419	15·2
April ... ..	30·112	64·7	70·9	58·2	5·450	24·490	0·060	13·3
May ... ..	30·104	58·5	64·9	52·0	5·180	20·868	0·214	15·7
June ... ..	30·097	54·4	60·5	48·2	5·421	16·296	0·190	12·9
July ... ..	30·119	52·3	58·9	45·7	4·471	13·208	0·120	12·0
August ... ..	30·113	54·8	62·2	47·5	3·159	14·886	0·040	11·5
September ..	30·034	58·9	66·3	51·3	2·869	14·045	0·083	12·1
October ... ..	30·007	63·4	71·0	55·8	2·892	10·810	0·210	12·7
November ...	29·986	66·9	74·2	59·6	3·045	9·880	0·200	12·6
December ...	29·920	69·9	77·1	62·8	2·475	7·804	0·453	12·9
The whole year ...	30·041	63·0	69·7	56·1	48·335	24·490	0·040	158·8

Taking the coast as a whole, the difference between the mean summer and mean winter temperature may be set down as not much over 20°—a range so small as to be rarely found elsewhere.

The North Coast districts are favoured with a warm, moist climate, the rainfall averaging from 40 to 70 inches annually. The mean temperature for the year is from about 66° to 69°, the mean summer being 75° to 78°, and the mean winter 56° to 58°. In the South Coast district the rainfall varies from 30 to 60 inches. The mean temperature ranges between 57° and 63°, the summer mean being from 66° at the foot of the ranges to 70° on the coast, and the winter from 48° to 54° over the same area.

The coastal rains come in from the sea with both south-east and north-east winds, being further augmented in the later part of the year by thunderstorms, which cross the mountains from the north-west. The principal precipitating agencies are the Antarctic depressions, the anti-cyclones when travelling in high latitudes, while in the extreme north-east reliable rains are precipitated by the south-east trades. The rainfalls are much heavier immediately near the coast.

The following table shows the meteorological conditions of the principal stations in the coastal division, arranged in the order of their latitude. These stations are representative of the whole division, and the figures are the averages of a large number of years.

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall—Mean Annual.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
Casino ... ..	28	82	67·1	74·1	56·4	25·7	116·4	21·0	43·81
Lismore ... ..	13	52	67·9	78·4	59·6	22·2	116·2	28·2	53·52
Clarence Heads ...	0	122	68·2	74·4	58·7	15·2	108·0	36·4	55·80
Grafton ... ..	22	40	68·2	77·1	57·6	27·0	118·0	20·9	38·77
Port Macquarie ...	0	49	63·8	71·6	54·9	17·6	105·4	24·8	62·04
Singleton ... ..	40	135	64·2	76·1	52·1	20·3	113·9	22·0	29·65
Morpeth... ..	15	20	63·8	73·9	54·3	18·1	108·7	26·0	38·73
West Maitland... ..	18	40	64·3	75·0	52·8	20·6	115·0	24·0	33·57
Port Stephens ...	0	30	64·1	72·6	53·1	20·8	111·2	30·2	54·07
Newcastle ... ..	1	34	64·5	72·5	55·4	15·4	110·5	31·3	47·04
Pitt Town ... ..	26	40	64·0	76·1	52·6	20·0	113·0	27·2	31·22
Emu ... ..	36	87	62·7	73·2	50·4	16·2	107·6	26·8	30·11
Sydney ... ..	5	146	62·9	70·9	53·8	13·6	108·5	35·9	48·34
Wollongong ... ..	0	54	62·9	70·1	54·8	17·0	113·4	31·9	42·11
Nowra ... ..	6	30	62·8	70·6	54·3	21·0	110·3	29·6	36·10
Point Perpendicular ...	0	284	61·6	69·1	53·8	15·0	105·2	25·5	57·38
Moruya Heads... ..	0	50	61·2	68·2	53·2	19·9	114·8	22·3	35·91
Bodalla ... ..	7	40	59·9	69·1	50·5	27·7	114·1	18·6	36·55
Bega ... ..	0	50	59·7	69·6	48·9	24·9	115·6	16·6	31·81
Eden ... ..	0	107	60·0	67·7	51·8	14·2	106·0	29·3	34·34

Coming to the tableland from the coast, a different climatic region is found. On the northern tableland the rainfall is consistent, ranging from 30 inches in the western parts to 40 inches in the eastern. The temperature is cool and bracing, the average for the year being between 54° and 60°; the mean summer temperature lies between 65° and 70°, and the mean winter between 43° and 45°. The southern tableland is the coldest part of the State, the mean annual temperature being only about 56°. In the summer the mean ranges from 57° to 68°, and in the winter from 54° to 44°. At Kiandra, the elevation of which is about 4,640 feet, the mean annual temperature is 44·5°. Near the southern extremity of the tableland, on the Snowy and Muniong Ranges, the snow generally lingers throughout the year.

The statement below shows, for the tableland division, similar particulars to those already given for the coastal division :—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
Tenterfield ...	80	2,827	59·4	70·1	47·2	25·6	107·1	12·0	33·62
Inverell ...	124	1,980	60·1	73·2	45·9	24·8	110·6	13·4	30·73
Glen Innes ...	90	3,518	58·0	68·3	44·6	24·9	107·3	14·4	32·09
Bundarra ...	113	2,000	60·8	72·3	48·8	25·2	101·0	17·5	29·57
Armidale ...	81	3,333	56·4	67·8	44·1	24·4	105·2	13·9	31·79
Walcha ...	83	3,386	54·5	66·3	47·4	23·4	104·1	10·0	30·30
Murrurundi ...	94	1,545	60·9	73·7	49·7	19·8	107·3	19·0	31·75
Cassilis ...	120	1,500	60·8	73·6	45·3	21·7	111·7	15·8	23·76
Scone ...	78	680	62·7	74·8	49·8	23·4	114·4	22·2	23·49
Muswellbrook ...	68	475	63·8	75·2	49·4	25·4	117·6	19·0	23·45
Mudgee ...	121	1,635	62·2	73·8	49·2	29·2	114·9	20·0	26·11
Bathurst ...	96	2,200	57·2	70·0	44·2	28·3	112·5	13·0	23·88
Kurrajong Heights ...	35	1,870	53·3	61·7	43·9	13·3	99·5	25·5	49·98
Mount Victoria ...	61	3,490	54·4	65·2	42·6	19·6	106·0	11·9	37·27
Kateomba ...	53	3,349	53·5	63·0	42·5	15·3	100·0	25·9	56·76
Carcoar ...	111	2,380	56·1	70·3	43·0	19·1	104·9	15·4	29·78
Springwood ...	42	1,216	61·1	70·8	47·2	17·4	104·8	32·5	41·10
Cowra ...	126	987	63·1	78·8	48·5	23·5	116·1	21·6	24·99
Picton ...	22	549	59·9	71·5	49·2	23·8	112·0	19·7	29·55
Crookwell ...	81	2,000	52·0	64·7	39·4	23·7	100·8	12·1	31·86
Moss Vale ...	31	2,205	55·7	66·1	44·2	17·5	106·0	18·9	39·10
Goulburn ...	54	2,129	56·4	67·9	44·0	24·7	111·0	13·0	25·63
Yass ...	92	1,657	58·5	71·8	44·1	20·7	108·5	21·5	24·66
Queanbeyan ...	60	1,899	56·5	67·4	42·0	22·2	109·4	15·8	22·75
Kiandra ...	88	4,640	44·5	56·3	32·3	24·1	102·3	20 below zero	64·70
Cooma ...	52	2,637	54·3	60·0	41·8	29·2	112·0	8·5	19·18
Bombala ...	37	3,000	53·9	62·4	42·8	26·6	104·1	15·5	22·92

To the west of the tableland division, where the land slopes away to the great plain district of the interior, the rainfall is distributed uniformly; and varies from 20 inches in the western parts to 30 inches in the eastern. By far the greater part of the wheat area is situated on the western slopes, an average rainfall of 25 inches being sufficient to ensure good yields. The mean annual temperature ranges from 69° in the north to 60° in the south; in the summer from 81° to 74°, and in the winter from 53° to 47°.

North of the Lachlan River, good rains are looked for from the monsoonal disturbances during February and March, although these may come as late as May, and incidentally during the remainder of the year. These mon-

soonal or seasonal rains are caused by the radiation in the interior during the summer months. The heat, during this period, suspends the moisture accumulated chiefly from the Southern Ocean, and towards the close of the summer and early in autumn the sun's power is reduced and the dew-point reaches the precipitating point.

In the Riverina district, south of the Murrumbidgee generally, and on the south-western slopes, fairly reliable rains, light but frequent, are experienced during the winter and spring months. These are an extension of the rains from South Australia and Victoria, and are carried into New South Wales by south-west winds, off-shoots from the great trade-wind belt.

The next statement gives, for the principal stations on the western slopes, information similar to that shown for the coastal and tableland divisions:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
Moree ... ..	204	680	68·7	81·1	54·6	26·4	117·3	18·0	23·22
Warialda ... ..	162	1,106	63·5	77·9	49·4	29·3	117·7	16·0	27·97
Bingara ... ..	153	1,200	63·9	75·0	52·8	28·3	116·6	15·5	30·51
Narrabri ... ..	193	697	66·8	81·0	51·8	28·8	118·9	18·4	26·12
Gunnedah ... ..	156	874	66·2	79·8	51·4	28·1	120·6	16·7	24·72
Coonabarabran ..	185	1,710	60·0	73·1	46·5	33·2	111·9	11·4	29·39
Quirindi ... ..	115	1,278	64·0	76·6	48·5	27·2	113·6	17·0	27·76
Dubbo ... ..	177	863	63·6	77·4	49·2	27·4	115·4	19·9	22·46
Forbes ... ..	176	789	63·0	77·0	48·7	24·6	118·4	24·0	20·16
Young ... ..	140	1,416	61·2	74·0	48·4	28·3	113·9	20·3	24·59
Marsdens ... ..	187	700	64·9	76·8	49·3	25·0	119·7	19·0	19·66
Murrumburrah ...	126	1,268	61·2	72·6	47·2	27·0	114·9	20·0	23·15
Wagga Wagga ...	158	615	61·6	75·9	47·3	28·2	119·0	18·4	21·75
Urana ... ..	213	400	62·3	76·2	48·1	22·6	117·0	18·4	17·10
Albury ... ..	175	531	60·7	74·4	47·2	28·3	117·3	20·2	28·15

The western district consists of a vast plain, the continuity of which is broken only by the insignificant Grey and Barrier Ranges. Owing to the absence of mountains in the interior, the annual rainfall over a great part of this division, which lies in the zone of perpetual high pressure, does not exceed 10 inches. It increases from 8 inches on the western boundary to 10 and 15 inches along the Darling River, and 20 inches on the eastern limits. The mean annual temperature ranges from 69° in the north to 62° in the south; in the summer from 83° to 74°, and in the winter from 53° to 45°.

Although the summer readings of the thermometer in this district may be from 10° to 20° higher than those on the coast, the heat is not distressing, and is, in fact, preferred by many people to the moisture and more enervating heat of the coastal regions. Excessive heat is only experienced

occasionally, and with many summers intervening, its occurrence being in all probability due to a temporary stagnation in the easterly atmospheric drift. Under normal conditions, air entering Western Australia with a temperature of from 70° to 80° would only accumulate 20° to 25° by contact with the radiation from the soil during its passage across the continent. Where there is stagnation, however, the air resting over the sandy soils of the interior becomes superheated, and on reaching the western districts of the eastern States shows a temperature sometimes as much as 40° above the normal. Extensive bush fires also are apt to cause a local rise in temperature, and this is due, not only to the actual heat generated, but also to the liberation of combustible matter into the atmosphere; and it has further been affirmed that the presence of a small excess of carbonic acid gas above the normal quantity in air raises the temperature several degrees. The winter is almost perfect. An average temperature of over 50°, accompanied by clear skies and an absence of snow, leaves little to be desired. It is fortunate, from the standpoint of health, that the climate of the Western Division is dry, otherwise the interior of the State, probably, would have become, with abundant rains, an impenetrable jungle. It is also owing chiefly to the dryness of the climate that Australia has become the producer of the best merino wool in the world.

The meteorological conditions of the western plains will be seen from the following statement; the information is similar to that given already for the other divisions of the State:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
Brewarrina ... ..	345	430	69·3	81·6	52·9	26·3	122·3	24·8	16·63
Walgett... ..	286	522	68·4	82·8	53·0	25·8	122·2	23·7	18·97
Bourke ... ..	386	350	69·3	83·4	54·1	27·2	127·0	25·3	15·27
Wilcannia ... ..	473	246	66·5	80·2	52·2	26·2	120·8	21·8	10·47
Cobar ... ..	345	803	66·8	80·3	51·7	24·9	118·7	25·0	14·68
Broken Hill ... ..	555	1,000	65·2	78·5	50·9	24·0	115·9	26·0	9·24
Mount Hope ... ..	296	600	65·3	80·9	50·3	24·8	123·6	24·6	15·27
Condobolin ... ..	227	700	62·6	76·7	50·8	25·5	122·2	20·5	17·68
Wentworth ... ..	478	144	64·1	76·8	51·2	26·7	119·0	25·0	11·79
Hay ... ..	309	291	63·6	76·1	50·5	28·3	117·3	21·1	14·35
Euston ... ..	422	188	64·2	77·0	51·0	33·2	124·8	17·1	12·13
Deniliquin ... ..	287	268	61·9	74·6	48·2	30·2	121·1	18·0	16·46

## CONSTITUTION AND PARLIAMENTS.

RESPONSIBLE Government was granted to New South Wales by the British Parliament in 1856, under an Imperial Act passed in 1855. Prior to that period the State was a Crown Colony, the Governor having virtually autocratic powers, and being responsible for his actions solely to the Colonial Office in London. The Constitution Act has since been amended in various particulars, and the present form of Government is briefly as follows :—

### THE GOVERNOR.

The Governor is the representative of the Crown, and is appointed by the Imperial Government, the term of office being five years. The Constitution provides for a salary of £5,000 per annum, and allowances for the Governor's staff amount to about £800 annually, these sums being provided by the State. The present Governor is Admiral Sir Harry Holdsworth Rawson, G.C.B.\* During the absence of the Governor, the duties of administration devolve on a Lieutenant-Governor, the present occupant of the office being the Hon. Sir F. M. Darley, Chief Justice of the State. Should both the Governor and the Lieutenant-Governor by any means be incapacitated from holding office, the duties are performed by the Senior Judge of the Supreme Court.

The powers and privileges of the Governor are set forth in his Commission, but space will permit of only brief reference to the principal of them. As representative of the Crown, the Governor has power to assent to Acts of Parliament, or to withhold the assent pending reference to the Imperial Government. There are certain classes of bills, however, specially mentioned in his Commission, to which he is bound to refuse Royal assent. He may summon and appoint his own Executive Council, and has power to appoint Judges, Justices of the Peace, Commissioners, and other necessary officers and Ministers, and by virtue of his office may remove these officials from their positions. The prerogative of mercy is vested in the Governor, but is never exercised except with the advice of the Executive Council.

The Governor may nominate members of the Upper House, and summon, prorogue, or dissolve any Parliament. In the exercise of these functions he is in general guided by the advice of the Executive Council. In special circumstances, however, he may act on his own initiative, and, in regard to dissolutions, it has happened more than once that the Governor has opposed the wishes of his Ministers.

### THE EXECUTIVE COUNCIL.

The Executive Council as constituted at present consists of eleven members, including the Governor as President. The Vice-President of the Executive is the representative of the Government in the Legislative

\* At the date of going to press Sir Harry Rawson had retired, and his successor, Lord Chelmsford, been appointed.

Council. In addition, there are seven salaried Ministers, and two other members without portfolio. These form the Cabinet, and are necessarily responsible to Parliament. The office of Executive Councillor is honorary, and each member is supposed to resign on a change of Ministry.

#### THE LEGISLATIVE COUNCIL.

No limit is set by the Constitution Act with regard to the maximum number of members of the Legislative Council, although the minimum is fixed at twenty-one. As the Governor has the power of nominating Councillors, it would at first sight appear that the privilege might at times prove a serious hindrance to legislation. There is, however, little fear of "swamping," the single occasion on which it was attempted arousing such strong public opinion that a repetition of the practice is unlikely. The number of Councillors at present is sixty-two. All persons under 21 years of age, persons not natural-born or naturalised subjects, those in allegiance to a foreign power, Government contractors or persons interested in Government contracts except as members of a company exceeding twenty in number, and members of either House of the Federal Parliament, are disqualified for membership. Subject to these few restrictions any citizen may be appointed. Members are not reimbursed for their services, but are granted a free railway pass, and, subject to certain conditions as to good conduct, hold their seats for life.

#### THE LEGISLATIVE ASSEMBLY.

At the present time the Legislative Assembly is composed of ninety members elected by ninety electoral districts. Every member must be an adult natural-born or naturalised British subject. Members of the Legislative Council, persons holding non-political offices of profit under the Crown, pensioners during pleasure or for a term, persons under electoral disqualification, the insane, and members of the Federal Legislature, are disqualified. The tenure of seat is for the duration of the Parliament to which the member is elected. Reimbursement for services is granted at the rate of £300 per annum to members not in receipt of official salary, and each member receives a free railway pass. The electoral qualification is as follows:—All male or female adults who are natural-born or naturalised British subjects, and not debarred under any of the terms of the Electoral Act, may become enrolled in the electoral division in which they reside, and vote therein. In order to be enrolled, a person must have his principal place of residence in the State continuously for one year, or, if naturalised, for one year after naturalisation, and have resided in the electoral district for which he seeks enrolment for a continuous period of three months prior to the date of application. General lists of electors are prepared once a year, and provisional lists are prepared and revised each month.

The Constitution Act makes no distinction between the powers and privileges of the two Houses of Parliament, but no inconvenience has been felt on this score, since it is tacitly agreed that the procedure in each House shall be conducted according to that of its prototype in the Imperial Parliament.

Since the inauguration of responsible government there have been twenty complete Parliaments: the date at which each opened and closed

will be found in the table below. The Act constituting triennial Parliaments was passed in 1874; previously the limit of duration was fixed at five years.

Parliament.	Opened.	Dissolved.	Duration.			No. of Sessions.
			yr.	mth.	dy.	
First ...	22 May, 1836...	19 Dec., 1857...	1	6	28	2
Second ...	23 March, 1838...	11 April, 1859...	1	0	19	2
Third ...	30 Aug., 1859...	10 Nov., 1860...	1	2	11	2
Fourth ...	10 Jan., 1861...	10 Nov., 1864...	3	10	0	5
Fifth ...	24 Jan., 1865...	15 Nov., 1869...	4	9	22	6
Sixth ...	27 Jan., 1870...	3 Feb., 1872...	2	0	7	3
Seventh ...	30 April, 1872...	28 Nov., 1874...	2	6	28	4
Eighth ...	27 Jan., 1875...	12 Oct., 1877...	2	8	16	3
Ninth ...	27 Nov., 1877...	9 Nov., 1880...	2	11	12	3
Tenth ...	15 Dec., 1880...	23 Nov., 1882...	1	11	8	3
Eleventh ...	3 Jan., 1883...	7 Oct., 1885...	2	9	4	6
Twelfth ...	17 Nov., 1885...	26 Jan., 1887...	1	2	9	2
Thirteenth ...	8 March, 1887...	19 Jan., 1889...	1	10	11	3
Fourteenth ...	27 Feb., 1889...	6 June, 1891...	2	3	7	4
Fifteenth ...	14 July, 1891...	25 June, 1894...	2	11	11	4
Sixteenth ...	7 Aug., 1894...	5 July, 1895...	0	10	29	1
Seventeenth ...	13 Aug., 1895...	8 July, 1898...	2	10	26	4
Eighteenth ...	16 Aug., 1898...	11 June, 1901...	2	9	26	5
Nineteenth ...	23 July, 1901...	16 July, 1904...	2	11	24	4
Twentieth ...	23 Aug., 1904...	12 July, 1907...	2	10	20	4
Twenty-first ...	2 Oct., 1907...	.....	.....	.....	.....	.....

At the election of the first Parliament the following persons were qualified to vote:—All male adult British subjects who, at the time of registration of electors and for six months previous to that date, owned freehold estate valued at £100, or occupied building or lodging or land under lease of three years, valued at £10 per annum. Holders of Government pastoral licenses and persons who had a yearly salary of £100, or paid £40 per annum for board and lodging, were also entitled to vote. Electors were allowed to vote in each electorate in which they possessed the necessary qualifications. In 1858 the franchise was given to every adult British subject who for six months previous to the collection of the rolls had resided in the district, or held freehold or leasehold property of the clear value of £100 or annual value of £10, or occupied building valued £10 per annum, or held Crown lease or license for pastoral purposes. Holders of miners' rights were allowed to vote in gold-fields electorates. Officers of military or police service were disqualified, as well as the insane, criminals, and persons in receipt of eleemosynary aid.

In 1893 the property qualifications were eliminated, and the franchise was extended to men on its present basis. Each elector was entitled to vote in one electorate only. In 1903 equal franchise was granted to women.

The next table gives details of the voting at the six elections since the principle of one man one vote became law.

Parliament.	Voters on Roll.	Number of Electors to a Member.	Total Members returned.	Members unopposed.	Contested Electorates.				
					Electors on Roll.	Votes recorded.	Percentage of Votes recorded.	Informal Votes.	Percentage of Informal Votes.
Sixteenth ..	298,817	2,390	125	1	254,105	204,246	80·38	3,310	1·62
Seventeenth ..	267,458	2,139	125	8	238,233	153,034	64·24	1,354	0·88
Eighteenth ...	324,339	2,595	125	3	294,481	178,717	60·69	1,638	0·92
Nineteenth ...	316,184	2,769	125	13	270,861	195,359	72·13	1,534	0·79
Twentieth {	Males... 363,062	7,661	90	2	304,396	226,057	74·26	3,973	0·59
	Females 326,428				262,433	174,538	66·51		
Twenty-first {	Males... 392,845	8,288	90	5	370,715	267,301	72·10	13,543	2·87
	Females 353,055				336,680	204,650	60·78		

As the table shows, the largest percentage of votes was recorded at the first election, when no less than 80·4 per cent. of the electors in contested districts exercised the privilege of the franchise. This election involved a strenuous contest on fiscal reform, and the small proportions of votes recorded at the two succeeding elections were partly due to the fact that no definite issue was at stake, the chief question being which leader would negotiate for federation with the other colonies. At the election for the nineteenth Parliament over 72 per cent. of qualified electors voted. The figures for the 1904 election show that only 70·7 per cent. of the electors took the trouble to record their votes. This was the first State election at which women voted, and it appears that while 74 per cent. of qualified male voters recorded their votes, only 66 per cent. of the females did so. In 1907 the proportion of men who voted decreased to 72 per cent., and only 60·78 per cent. of the women recorded their votes. Greater facilities for voting were introduced at this election, and making every allowance for exceptional circumstances, the figures show a marked diminution in the number of people who manifest interest in the important industrial questions of the day or realise their duties in connection with the franchise. This is especially noticeable in the case of women electors, two-fifths of whom neglected to vote.

The various Ministries which have held office since the establishment of Responsible Government, together with the duration in office of each, are shown below:—

No.	Ministry.	From—	To—	Duration.	
				months.	days.
1	Donaldson ... ..	6 June, 1856	25 Aug., 1856	2	20
2	Cowper ... ..	26 Aug., 1856	2 Oct., 1856	1	8
3	Parker ... ..	3 Oct., 1856	6 Sept., 1857	11	4
4	Cowper ... ..	7 Sept., 1857	26 Oct., 1859	25	20
5	Forster ... ..	27 Oct., 1859	8 Mar., 1860	4	13
6	Robertson ... ..	9 Mar., 1860	9 Jan., 1861	10	1
7	Cowper ... ..	10 Jan., 1861	15 Oct., 1863	33	6
8	Martin ... ..	16 Oct., 1863	2 Feb., 1865	15	18
9	Cowper ... ..	3 Feb., 1865	21 Jan., 1866	11	19
10	Martin ... ..	22 Jan., 1866	26 Oct., 1868	33	5
11	Robertson ... ..	27 Oct., 1868	12 Jan., 1870	14	17
12	Cowper ... ..	13 Jan., 1870	15 Dec., 1870	11	3
13	Martin ... ..	16 Dec., 1870	13 May, 1872	16	29
14	Parkes ... ..	14 May, 1872	8 Feb., 1875	32	26
15	Robertson ... ..	9 Feb., 1875	21 Mar., 1877	25	13
16	Parkes ... ..	22 Mar., 1877	16 Aug., 1877	4	26
17	Robertson ... ..	17 Aug., 1877	17 Dec., 1877	4	1
18	Farnell ... ..	18 Dec., 1877	20 Dec., 1878	12	3
19	Parkes ... ..	21 Dec., 1878	4 Jan., 1883	48	15
20	Stuart ... ..	5 Jan., 1883	6 Oct., 1885	33	2
21	Dibbs ... ..	7 Oct., 1885	21 Dec., 1885	2	15
22	Robertson ... ..	22 Dec., 1885	25 Feb., 1886	2	4
23	Jennings ... ..	26 Feb., 1886	19 Jan., 1887	10	22
24	Parkes ... ..	20 Jan., 1887	16 Jan., 1889	23	28
25	Dibbs ... ..	17 Jan., 1889	7 Mar., 1889	1	19
26	Parkes ... ..	8 Mar., 1889	22 Oct., 1891	31	15
27	Dibbs ... ..	23 Oct., 1891	2 Aug., 1894	33	11
28	Reid ... ..	3 Aug., 1894	13 Sept., 1899	61	11
29	Lyne ... ..	14 Sept., 1899	27 Mar., 1901	18	14
30	See ... ..	28 Mar., 1901	14 June, 1904	38	18
31	Waddell ... ..	15 June, 1904	29 Aug., 1904	2	15
32	Carruthers ... ..	30 Aug., 1904	1 Oct., 1907	37	3
33	Wade ... ..	2 Oct., 1907	Still in office.	.....	.....

The Wade Ministry, which is at present in office, is composed of the following members:—

Premier, Attorney-General, and Minister of Justice	Hon. C. G. WADE.
Colonial Secretary and Secretary for Mines...	Hon. W. H. WOOD.
Colonial Treasurer	Hon. T. WADDELL.
Secretary for Lands	Hon. S. W. MOORE.
Secretary for Public Works	Hon. C. A. LEE.
Minister for Agriculture	Hon. J. PERRY.
Minister of Public Instruction, and for Labour and Industry	Hon. J. A. HOGUE.
Minister without portfolio	Hon. J. ASHTON, M.L.C.
Minister without portfolio	Hon. C. W. OAKES.
Vice-President of Executive Council, and Representative of the Government in the Legislative Council	Hon. J. HUGHES, M.L.C.

## POPULATION.

WHEN Captain Phillip arrived in Sydney Harbour on the 26th January, 1788, he was accompanied by about 1,030 people. In the succeeding years the population increased and settlement spread, and there were off-shoots from the parent Colony. Thus Tasmania was constituted in 1803, Victoria in 1851, and finally, Queensland was separated in 1859.

The first census taken after New South Wales was restricted to its present limits was on the 7th April, 1861, when the population was 350,860. The last census was taken on the 31st March, 1901, when the population had increased to 1,359,133. The population at each census period from 1861 to 1901 will be seen below, and, in addition, the estimated population as at the 31st December, 1907, is shown. The figures are inclusive of aboriginal natives :—

Year.	Males.	Females.	Total.
1861	198,488	152,372	350,860
1871	275,551	228,430	503,981
1881	411,149	340,319	751,468
1891	612,502	519,672	1,132,234
1901	712,456	646,677	1,359,133
1907	841,391	731,833	1,573,224

The relative increase from census to census, and up to the end of 1907, may be measured according to any of the methods shown in the following statement. In the first column, the population in 1861 is taken as a basis :—

Year.	Growth of Population.	Increase for period.	Increase per annum.	Persons per square mile.
		per cent.	per cent.	
1861	100	.....	.....	1.12
1871	144	43.64	3.69	1.61
1881	214	49.11	4.08	2.41
1891	323	50.67	4.19	3.64
1901	387	20.04	1.84	4.38
1907	448	15.75	2.47	5.07

It will be seen that the population has increased more than fourfold since 1861, and has more than doubled since 1881, but there has been a great falling-off in the rate of increase since 1891. Prior to that year the annual increase was about 4 per cent., but up to 1904 it was under 2 per cent. Since 1904 the rate of increase has advanced, and is now higher than at any time since 1891. In 1861 the number of persons per square mile was 1.1, in 1891 it was 3.6, and in 1907 it was over 5.

The growth of population depends upon two factors—the natural increase or excess of births over deaths, and the increase by excess of immigration over emigration. The increase due to each source from the census of 1861 to 1907 was:—

Period.	Increase by excess of Births over Deaths.	Increase by excess of Immigration over Emigration.	Total Increase.
1861-71	106,077	47,044	153,121
1871-81	140,382	107,105	247,487
1881-91	211,301	169,465	380,766
1891-1901	226,676	223	226,899
1901-07	110,246	53,451	193,697

The increase by excess of immigration grew steadily larger during each inter-censal period up to 1891, but the decade 1891 to 1901 shows a very glaring contrast with the previous periods. The increase during those ten years was only 223 by excess of arrivals. There has been, however, a considerable improvement since 1901. The period 1861-1871, following the discovery of gold, saw the excitement abate somewhat and a demand for land created. The public lands were, therefore, thrown open for free selection, and many persons were assisted to immigrate to the State. During the next period, ending 1881, the stream of assisted immigration continued, and it was also during this period that a vigorous policy of public works was inaugurated. This continued throughout the next decade, and, consequently, many persons were attracted to the State by the ease with which employment could be obtained and the high rates of wages, notwithstanding that State-aided immigration practically ceased in 1886. Towards the end of this decade, expenditure, both State and private, was suddenly curtailed, and there was a consequent scarcity of employment and check to immigration. The year 1891 practically saw the end of immigration, and for twelve years after the population progressed only by reason of the natural increase. The balance of migration was, however, affected by other causes. One was the rush of men to Western Australia after the discovery of gold in 1894; another was the departure of over 5,000 troops to the war in South Africa, from 1899 to 1901. The latter have since returned, as well as many of those in the former category, and the excess of immigration since 1901 has improved, the figures being 53,451, as stated.

The population of New South Wales is primarily ascertained at the census, which is taken every ten years. As, however, the population for the intervening years is required for many purposes, it becomes necessary to determine it as accurately as possible, and estimates are therefore made from the records of births and deaths, and of immigration and emigration. The machinery for the registration of births and deaths ensures a reliable return under those heads, and, as regards the migration returns, experience shows that, while the records of over-land migration are by no means perfect, they give with fair accuracy the gain or loss to the State across its borders. In the case of the sea traffic, however, the returns are less reliable, as there are persons who go on board vessels after the passenger-list is made up, and whose departure is, therefore, not recorded. An allowance, based upon the experience of the inter-censal years, 1891 to 1901, is made on account of such unrecorded departures by sea, and it is believed amply covers the defect of the emigration returns. In 1901, at the census, the population estimated according to this method was nearly 14,000, or a little more than 1 per cent., over the actual number. This figure would make no appreciable difference in calculating rates per head. In the United Kingdom, where

migration is more or less steady, it is the practice to estimate the population at any time on the assumption that the annual rate of increase during the last inter-censal period has steadily continued. This method, however, would not be at all suitable for New South Wales, on account of the irregular movement of the population.

The variations in the annual growth of population are shown in the following table, which gives the population of New South Wales, inclusive of aborigines, at the end of each of the last seventeen years. The increase due to each of the factors already mentioned is also given, as well as the annual increase per cent. :—

Year (31st December).	Population.	Annual Increase.			Increase per cent. per annum.
		By excess of Births over Deaths.	By excess of Immigration over Emigration.	Total.	
1891	1,162,190	23,172	17,158	40,330	3.50
1892	1,191,790	25,631	3,969	29,000	2.55
1893	1,214,550	24,320	— 1,560	22,760	1.91
1894	1,239,250	23,781	919	24,700	2.03
1895	1,262,270	23,860	— 840	23,029	1.86
1896	1,278,970	20,667	— 3,967	16,700	1.32
1897	1,301,780	22,983	— 173	22,810	1.78
1898	1,323,130	19,561	1,789	21,350	1.64
1899	1,341,080	20,560	390	20,950	1.58
1900	1,364,590	22,028	— 1,518	20,510	1.53
1901	1,379,527	21,854	— 6,917	14,937	1.09
1902	1,407,619	21,189	6,903	28,092	2.04
1903	1,431,611	19,469	4,523	23,992	1.70
1904	1,461,549	23,307	6,631	29,938	2.09
1905	1,496,007	24,523	9,935	34,458	2.36
1906	1,530,581	25,973	9,004	34,977	2.34
1907	1,573,224	25,785	16,455	42,240	2.76

The — sign indicates a decrease on account of excess of departures over arrivals.

This table shows clearly the falling-off between 1891 and 1901; during six of the years the balance of migration was against the State. It is, however, satisfactory to note the change for the better since 1901, until in 1907 the total increase, 42,240 was the largest in any year since 1885. The excess of births, practically the same as for 1906, was the highest during the period covered by the table, and the relative increase was the highest since 1891. The excess of immigration was little inferior to that of 1891, the highest during the period under review. The least satisfactory feature of the migration returns is that the gain was largely at the expense of the other Australian States and New Zealand. There is a very large movement of population each year, but it can hardly be described as immigration and emigration in the popular sense in which those terms are used, and is largely due to the arrival and departure of tourists and business men. The main reasons adduced for the lack of immigration to Australia are the distance of the country from Europe, the time taken up on the voyage, and the cost of passage. Another reason is the comparative ignorance of European people with regard to the resources of the State. In 1905, however, matters were very radically changed. Systematic efforts have since been made in the United Kingdom to advertise the progress and resources of the State, and assistance has been granted as an inducement to immigrants. There has also been a revival of public interest in the matter, and already a great change is to be seen; 681 picked persons, of most desirable character, were assisted to immigrate to the State by the Government in 1906, and 2,845 persons in 1907, and generally the movement of population with the United Kingdom, which, during the five years 1901-05, was against the State, turned during 1906 largely in favour of it.

The next table shows the arrivals in, and departures from, the State by sea and by land during the last seventeen years, proper allowance being made therein for those unrecorded :—

Year.	Arrivals.			Departures.		
	By Sea.	By Land.	Total.	By Sea.	By Land.	Total.
1891	69,919	77,270	147,189	56,775	73,256	130,031
1892	62,197	68,255	130,452	57,476	69,007	126,483
1893	66,909	49,693	116,602	64,034	54,128	118,162
1894	75,588	47,090	122,678	71,773	49,986	121,759
1895	76,051	58,075	134,126	72,128	62,838	134,966
1896	62,633	64,746	127,379	67,887	63,459	131,346
1897	67,016	71,349	138,365	65,611	72,927	138,538
1898	75,526	69,940	145,466	71,398	72,279	143,677
1899	77,634	71,983	149,617	71,563	77,664	149,227
1900	68,783	82,530	151,313	67,190	85,641	152,831
1901	76,139	87,474	163,613	69,500	101,030	170,530
1902	81,191	79,459	160,650	67,400	86,347	153,747
1903	70,570	81,773	152,343	63,632	84,188	147,820
1904	72,978	83,284	156,262	63,588	86,043	149,631
1905	74,170	93,134	172,304	63,682	98,687	162,369
1906	79,465	113,871	193,336	68,792	115,540	184,332
1907	101,125	140,214	241,339	81,836	142,998	224,834

The following table shows the movement of population between New South Wales and various countries during the last five years. Nearly 84 per cent. of the movement is with the other Australian States, and more than one-half of the movement with countries outside Australia is with New Zealand :—

Countries.	1903.	1904.	1905.	1906.	1907.
ARRIVALS.					
Australian States ... ..	124,302	126,194	142,449	162,165	198,949
New Zealand ... ..	12,868	14,314	15,093	16,525	20,204
United Kingdom ... ..	4,249	4,842	4,859	5,641	9,782
Other British Possessions ... ..	2,313	3,172	3,490	3,825	6,737
Foreign Countries ... ..	8,611	7,740	6,413	5,180	5,668
Total ... ..	152,343	156,262	172,304	193,336	241,339
DEPARTURES.					
Australian States ... ..	119,103	121,931	135,457	154,999	191,753
New Zealand ... ..	13,204	12,782	12,310	15,452	18,774
United Kingdom ... ..	5,136	5,837	5,501	4,627	4,583
Other British Possessions ... ..	4,293	3,980	4,278	4,508	4,836
Foreign Countries ... ..	6,084	5,101	4,823	4,746	4,953
Total ... ..	147,820	149,631	162,369	184,332	224,834

The net gain from countries outside the Commonwealth during 1907 was 9,260. In 1905 the gain was 2,943, and in 1906 it was 1,838. Excluding New Zealand, the excess of arrivals from countries beyond Australia during 1907 was 7,830. From the United Kingdom there was a gain of 5,199; from South Africa of 2,464, and from foreign countries of 1,208, while there was a loss of 563 to other British possessions, and of 478 to the United States.

The following statement gives the population for each of the States of the Commonwealth at the Census of 1901, and at the 31st December, 1907, exclusive of full-blooded aborigines. The proportion of population in each State is shown, and the rate of increase per annum since the Census of 1901 :—

State.	Population 31st March, 1901.		Population 31st December, 1907.		Increase per cent. per annum from the Census to 31st December, 1907.
	Number.	Per cent.	Number.	Per cent.	
New South Wales ...	1,354,846	35·91	1,568,937	37·22	2·20
Victoria ...	1,201,070	31·83	1,258,140	29·85	·69
Queensland ...	498,129	13·20	546,467	12·66	1·38
South Australia ...	362,604	9·61	396,028	9·40	1·31
Western Australia ...	184,124	4·88	262,846	6·26	5·47
Tasmania ...	172,475	4·57	181,624	4·31	·77
Commonwealth...	3,773,248	100·00	4,215,042	100·00	1·65

The average natural increase is about  $1\frac{1}{2}$  per cent. per annum. It is, therefore, apparent that all the States, with the exception of New South Wales and Western Australia, have lost population since the Census, by reason of the departures exceeding the arrivals. The two States mentioned have gained from the others.

#### DISTRIBUTION OF SEXES.

It is estimated that, at the end of 1907, there were 841,391 males and 731,833 females in the State, the proportion of the sexes being, therefore, males 53·48 per cent., and females 46·52 per cent., or about 115 males to 100 females. At the Census of 1901, the males constituted 52·42 per cent. and the females 47·58 per cent. of the total. The distribution of the sexes has undergone little change for several years past, but the tendency is continuously towards equality, as will be seen from the following statement, which gives the proportion of males and females at each Census from 1861 to 1901, and at the end of 1907 :—

Year.	Proportion of Males.	Proportion of Females.	Males per 100 Females.
	per cent.	per cent.	No.
1861	56·57	43·43	130.
1871	54·67	45·33	121
1881	54·86	45·14	121
1891	54·14	45·86	118
1901	52·42	47·58	110
1907	53·48	46·52	115

The excess of males over females is chiefly at ages above 30 years, and is due to the large immigration of males in former years. In 1901 there was less difference between the proportion of the sexes than ever before, as there was very little immigration during the preceding ten years, and the natural increase of females, which is larger than that of males, had its full effect. In 1907 the proportion of males was higher than in 1901, owing to increased immigration.

#### URBAN AND RURAL POPULATION.

To anyone unacquainted with the conditions of Australian progress, the figures relating to the distribution of population in New South Wales will, perhaps, appear somewhat remarkable. The population aggregated

in the Metropolitan area is considerably larger than that in all the other towns of the State taken together, and is also greater than the whole of the rural population. At the Census of 1901, 35·8 per cent. of the inhabitants of New South Wales resided in the metropolis, 32·8 per cent. in the other urban districts, and 31·4 per cent. in the rural districts. The following statement shows the distribution of the population on the 31st March, 1901 :—

In the Metropolitan area	...	...	...	...	481,830
In Newcastle and Suburbs	...	...	...	...	53,741
In 11 towns with population of 5,000 and under 20,000	...	...	...	...	98,889
In 42 " " 2,000 " 5,000	...	...	...	...	125,683
In 62 " " 1,000 " 2,000	...	...	...	...	91,359
In 106 " " 500 " 1,000	...	...	...	...	72,771
Urban Population	...	...	...	...	924,273
Rural Population	...	...	...	...	422,447
Total	...	...	...	...	1,346,720
Shipping	...	...	...	...	8,026
Aborigines	...	...	...	...	4,287
Lord Howe Island	...	...	...	...	100
Total Population, New South Wales	...	...	...	...	1,359,133

During the ten years from 1891 to 1901, while the rural population increased by 34,101, the urban population increased by 194,369, and of the latter 98,547 were in the metropolitan district. It would therefore appear, judging by ratio of increase, that the urban population is increasing three times as rapidly as the rural. Thirty years ago, out of every 1,000 persons living in New South Wales 532 were in the rural districts of the State, but the proportion is now only 314, and this anomaly exists although every possible inducement has been offered to persons to settle away from the towns. The following table shows the urban as distinct from the rural population at each census from 1861 to 1901 :—

	1861.	1871.	1881.	1891.	1901.
Sydney and Suburbs	95,789	137,586	224,939	383,283	481,830
Other Towns	64,045	97,037	201,731	346,621	442,443
Total Urban	159,834	234,623	426,670	729,904	924,273
„ Rural	189,116	266,956	321,571	388,346	422,447
Total	348,950	501,579	748,241	1,118,250	1,346,720

The total population shown here is exclusive of shipping and aborigines. These figures indicate that at some period between 1871 and 1881 the urban population, which had previously been considerably below that of the rural districts, became equal to the population living in the country districts. The year when this event occurred was probably 1875. Thenceforward the urban population grew far more rapidly, so that in 1901 it was found to exceed the rural by about 120 per cent. The progress of population will be best seen from the following table, which gives the respective proportions per cent. of the urban and rural population to the whole population of the State :—

	1861.	1871.	1881.	1891.	1901.
Sydney and Suburbs	27·45	27·43	30·06	34·27	35·78
Other Towns	18·35	19·35	27·00	31·00	32·85
Total Urban	45·80	46·78	57·06	65·27	68·63
„ Rural	54·20	53·22	42·94	34·73	31·37

The relation of these two sets of figures will, perhaps, be more clearly perceived by a presentation of the annual increase per cent. during each decade, of urban and rural population :—

		1861-71.	1871-81.	1881-91.	1891 1901.
Urban	... ..	3·92	6·16	5·52	2·39
Rural	... ..	3·50	1·88	1·90	0·85

As the normal rate of increase due to the excess of births over deaths during the period 1871 to 1881 was 2·32 per cent., from 1881 to 1891, 2·23 per cent., and from 1891 to 1901, 1·80 per cent., the figures in the above table show clearly that the rural districts of the State are not retaining, and have not retained for several years past, their natural increase of population, and that the towns have attracted not only immigrants to the State, but also some portion of the rural population. Various causes have conduced to this state of affairs. In England, France, and Germany, the abnormal growth of the urban population during the last thirty or forty years has been largely due to the increase in the manufacturing industries, which, necessarily, have been established in or near towns, have changed the occupations of the people, and have consequently attracted from the country young people in search of employment. Even in the United States, the most favoured country for the agricultural labourer, the same conditions exist. But in America the rise of the great cities has been accompanied by an increase in the rural population.

In Australia, however, influences of a different kind are at work, and the growth of the metropolitan centres has been marked by special features. There can be no difficulty in understanding the growth of cities such as London, which are large trading centres. But Sydney, which contains over 36 per cent. of the population of New South Wales, and whose commerce is the most valuable of the ports of Australia, can claim little trade which is not due to the productiveness of its own territory. There has been no abnormal increase of factories, yet, as previously indicated, the rural growth has been slower than the metropolitan.

The rapid growth of Sydney has been due mainly to the physical configuration of New South Wales which renders Port Jackson the only considerable commercial outlet. The coastal rivers are all short, none of them stretching into the interior, and their estuaries do not present good roadsteads for shipping. The State had its beginning on the site whereon has grown the city, and Sydney, being the chief port, was of necessity the only channel through which immigrants from foreign lands could pass to the interior. Immigrants to Australia linger in their port of debarkation, and seldom care to leave it while employment is procurable.

In this connection the following table is of interest, as it shows where the persons of different nationalities in the State have settled, whether in the towns or in the country. The figures represent the approximate proportion per cent. of the total population residing in the urban and rural districts at the census of 1901 :—

Distri t.	Nationality.			All persons.
	Australian.	British.	Foreign.	
Metropolis ... ..	33·40	47·21	44·43	35·78
Other Incorporated Towns...	27·74	26·23	24·85	27·64
Rural... ..	38·86	26·56	30·72	36·58
Total ... ..	100 00	100 00	100 00	100 00

There is an apparent discrepancy between the proportions in the last table and in that on the preceding page. This is owing to the fact that in the last table only incorporated towns are included as "urban," whereas in the first table all towns with a population of 500 and over are included.

It will be seen that nearly half the British and foreign-born residents in the State are situated in the metropolis, and about three in every four in the urban districts collectively. Only one-third of the Australian-born dwell in the metropolis; but it should be remembered that 90 per cent. of the British and foreign-born are adults, as against 40 per cent. of the Australian-born.

The more or less backward state of rural development in New South Wales is largely explained by the great attention which the pastoral industry has received. Wool-growing has been for many years the staple industry. The actual tending of the flocks needs few hands, while the handling of bales of wool at a convenient place of shipment demands all the resources of a great commercial centre. A consideration of the circumstances governing settlement thus makes it clear that, while areas of splendid country devoted to primary production are in the hands of a comparatively small population, the production from primary sources has been so valuable that it has been possible to support a relatively large number of people collected in the centres of secondary production and distribution.

#### THE METROPOLIS.

The Metropolis includes Sydney and the forty-one municipalities which surround it, as well as the islands of Port Jackson, and embraces an area of a little over 142 square miles. The area included may be described roughly as a square bounded on the east by the sea coast, and on the south by the waters of Botany Bay and George's River; on the west by Hurstville, Canterbury, Enfield, Strathfield, Concord, and Ryde; on the north by Ryde, Eastwood, Willoughby, and Manly. The habitations within these limits are fairly continuous, with the exception of parts of Ryde and Canterbury. The following statement shows, at the Census of 1901, and on the 31st December, 1907, the population of each municipality of the metropolis:—

Municipality.	Population 31st Mar., 1901.	Population 31st Dec., 1907.	Municipality.	Population 31st Mar., 1901.	Population 31st Dec., 1907.
City of Sydney ...	118,207	118,370	Leichhardt ...	17,454	22,820
Alexandria ...	9,341	10,820	Manly ...	5,035	8,840
Annandale ...	8,349	10,150	Marrickville ...	18,775	24,630
Ashfield ...	14,329	18,430	Eastwood ...	713	890
Balmain ...	30,076	29,910	Mosman ...	5,691	11,440
Bexley ...	3,079	5,420	Newtown ...	22,598	23,740
Botany ...	3,383	4,080	North Sydney ...	22,040	29,320
Botany, North ...	3,772	5,380	Paddington ...	21,984	22,140
Burwood ...	7,521	8,670	Petersham ...	15,307	19,260
Camperdown ...	7,931	8,910	Randwick ...	9,753	13,420
Canterbury ...	4,226	8,170	Redfern ...	24,219	23,920
Concord ...	2,818	3,330	Rockdale ...	7,857	11,680
Darlington ...	3,784	3,390	Ryde ...	3,222	4,230
Drummoyne ...	4,244	7,100	St. Peter's ...	5,906	7,830
Enfield ...	2,497	3,130	Strathfield ...	2,991	3,520
Ersleville ...	6,059	6,810	Vaucluse ...	1,152	1,700
Glebe ...	19,220	20,100	Waterloo ...	9,609	10,420
Homebush ...	*	500	Waverley ...	12,342	16,530
Hunter's Hill ...	4,232	4,340	Willoughby ...	6,004	10,650
Hurstville ...	4,019	6,640	Woollahra ...	12,351	14,480
Kogarah ...	3,892	6,280			
Lane Cove ...	1,918	3,790	Total ...	487,900	577,180

\* Included with Strathfield.

The population of the metropolis is rather unevenly distributed. One-half of the inhabitants are crowded into a little over 6,000 acres, having a density per acre of 25 to 100, while one-third occupy about 18,000 acres with an average density of 9, and the remainder are scattered over about 67,000 acres, and have a density of a little over 1 per acre.

## COUNTRY DISTRICTS.

Outside the metropolitan districts settlement at first tended to follow the main roads, but with the establishment of the railway, the population settled within reach of the railway lines. In other parts of the country, however, especially in the coastal area, where the bulk of the people dwell, the development of the towns has more than kept pace with the general population. Thus, in the Valley of the Hunter, with its large agricultural and mining industries, population has made rapid strides. Newcastle and suburbs, for instance, increased from 7,810 in 1861 to 54,991 in 1901, and 63,250 in 1907. The Illawarra district, rich in coal and pasture, and the maize and sugar-growing districts of the Clarence and Richmond Rivers have also increased largely. The next statement shows, at the Census of 1901, and at the 31st December, 1907, the populations of the principal country municipalities of New South Wales :—

Municipality.	Population.		Municipality.	Population.	
	Census, 1901.	31st Dec., 1907.		Census, 1901.	31st Dec., 1907.
Albury .. .. .	5,821	6,980	Lithgow .. .. .	5,263	8,130
Armidale .. .. .	4,249	5,000	Liverpool .. .. .	3,901	4,800
Bathurst .. .. .	9,223	9,220	Maitland, East and West ..	10,073	12,100
Bourke .. .. .	2,609	1,670	Mudgee (including Cudgegong)	5,774	6,060
Broken Hill .. .. .	27,500	33,590	Narrabri and West Narrabri..	2,963	2,750
Casino .. .. .	1,926	3,750	Newcastle and Suburbs ..	54,991	63,250
Cobar .. .. .	3,371	4,670	Orange and East Orange ..	6,331	6,950
Cootamundra .. .. .	2,424	2,850	Parkes .. .. .	3,181	3,800
Dentiquin .. .. .	2,644	2,750	Parramatta .. .. .	12,560	13,000
Dubbo .. .. .	3,409	4,380	Penrith .. .. .	3,539	3,880
Forbes .. .. .	4,294	4,500	Singleton .. .. .	2,872	3,000
Glen Innes .. .. .	2,913	3,500	Tamworth .. .. .	5,799	6,800
Goulburn .. .. .	19,612	10,600	Tenterfield .. .. .	2,694	3,040
Grafton and South Grafton..	5,147	5,210	Wagga Wagga .. .. .	5,108	5,780
Granville .. .. .	5,094	7,500	Wellington .. .. .	2,984	4,400
Hay .. .. .	3,012	2,750	Windsor .. .. .	2,089	4,250
Inverell .. .. .	3,293	3,500	Wollongong .. .. .	3,545	4,000
Katoomba .. .. .	2,270	3,100	Yass .. .. .	2,220	2,600
Kempsey .. .. .	2,329	2,500	Young .. .. .	2,755	2,900
Lismore .. .. .	4,373	6,500			

None of these municipalities is densely populated, the most closely inhabited averaging only a little over 6 persons per acre. The largest is Cudgegong, with an area of 122,880 acres, and the smallest Singleton, with 621 acres.

## AGES OF THE PEOPLE.

The Census of 1901 furnished full particulars with regard to the ages of the people of New South Wales at that date. The table given below shows the number of persons, male and female, at each quinquennial period of age up to 85. The males in their 21st year numbered 12,754, and the females, 13,457. Aboriginal natives are not included:—

Ages.	Population.			Proportion per cent.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years ... ..	80,308	78,553	158,861	11·31	12·18	11·73
5—9 ... ..	84,189	81,946	166,135	11·86	12·71	12·26
10—14 ... ..	81,582	80,097	161,679	11·49	12·42	11·93
15—19 ... ..	70,423	70,736	141,159	9·94	10·97	10·43
20—24 ... ..	62,448	64,818	127,266	8·89	10·07	9·45
25—29 ... ..	56,273	56,043	112,316	8·01	8·70	8·34
30—34 ... ..	52,596	46,697	99,293	7·45	7·25	7·36
35—39 ... ..	52,335	41,593	93,928	7·41	6·46	6·96
40—44 ... ..	44,930	33,436	78,366	6·35	5·19	5·80
45—49 ... ..	33,338	24,001	57,339	4·71	3·73	4·24
50—54 ... ..	25,615	19,327	44,942	3·62	3·00	3·33
55—59 ... ..	19,634	15,376	35,010	2·77	2·39	2·59
60—64 ... ..	16,733	12,192	28,925	2·36	1·89	2·14
65—69 ... ..	13,005	9,237	22,242	1·84	1·44	1·65
70—74 ... ..	7,772	5,202	12,974	1·10	·80	·96
75—79 ... ..	3,578	2,844	6,422	·51	·44	·47
80—84 ... ..	1,883	1,574	3,457	·27	·25	·25
85 and over ... ..	800	678	1,478	·11	·11	·11
Unspecified { Children	277	44	321	.....	.....	.....
	Adults ...	2,286	2,733	.....	.....	.....
All Ages .....	710,005	644,841	1,354,846	100·00	100·00	100·00

At ages under 30 there is very little difference in number between the males and females—in fact, between ages 15 and 25 the females are the greater. At ages over 30 the males are very much in excess of the females. If a comparison be made with the results of the previous census, it will be found that the age constitution of the people has materially altered since 1891. The Census of that year showed a steady progression in the population, both of males and females, from infancy to old age, the only exceptions being that the males showed increases in the periods from 20 to 25 years and from 25 to 30 years. The results of the Census of 1901 show that the largest number at any age period is found from 5 to 10 years, while the number in the first age group—under 5 years—is also exceeded by the total between 10 and 15 years. Not only has the proportion of the children under 5 decreased since 1891, but the actual number has decreased by 6,112.

The following statement shows the population distributed in certain conventional groups, and, in order to account for the whole population, the unspecified have been apportioned among the specified :—

Group.	Number.			Proportion per cent.		
	Males.	Females.	Total.	Males.	Females.	Total.
Infants—under 5 ...	80,318	78,564	158,882	11·31	12·19	11·73
School age—5-14...	165,791	162,064	327,855	23·35	25·13	24·20
Supporting ages—15-64...	436,781	384,650	821,431	61·52	59·65	60·63
Old age—65 and over ...	27,115	19,563	46,678	3·82	3·03	3·44
Total ..	710,005	644,841	1,354,846	100·00	100·00	100·00
Adults—21 and over ...	380,472	320,008	700,480	53·59	49·63	51·70
Military age—20 to 39 ...	225,485	.....	.....	31·76	.....	.....
Reproductive age—15 to 44	.....	313,655	.....	.....	48·64	.....

The statutory school ages extend over eight years, from 6 to 14. At this life-period there were 133,238 boys and 130,597 girls, the total being 263,835, or 19·47 per cent. of the whole population.

#### BIRTHPLACES OF THE PEOPLE.

The population of New South Wales is probably more homogeneous than that of any other country, the bulk of the people being of direct British origin. At the census of 1901 no less than 96½ per cent. were born in Australia or the United Kingdom, 1 per cent. were born in British possessions and foreign countries, but were mainly of British extraction, and only 2½ per cent. were foreign born. Of course, some of the native born are of foreign extraction, but the number is small.

At the census of 1901 the birthplaces of 1,353,408 persons were ascertained, the remaining 1,438 neglecting to state their country of birth. The following statement shows the number and proportion of each sex born in various countries.\* The figures are exclusive of aborigines :—

Birthplace.	Number.			Proportion per cent.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales ...	487,039	490,137	977,176	68·67	76·07	72·20
Other Australian States and New Zealand ...	59,272	53,295	112,567	8·36	8·27	8·32
England and Wales ...	78,441	51,298	129,739	11·06	7·96	9·58
Scotland ...	18,566	12,151	30,717	2·62	1·89	2·27
Ireland ...	30,463	29,482	59,945	4·30	4·58	4·43
Other British Possessions	4,518	1,435	5,953	·64	·22	·44
Total, British Empire	678,299	637,798	1,316,097	95·65	98·99	97·24
German Empire ...	6,390	2,326	8,716	·90	·36	·64
Other European Countries	10,437	2,120	12,557	1·48	·33	·93
United States of America and Possessions ...	2,205	925	3,130	·31	·14	·23
Chinese Empire ...	9,890	103	9,993	1·39	·02	·74
Other Foreign Countries...	775	173	948	·11	·03	·07
Total, Foreign Countries	29,697	5,647	35,344	4·19	·88	2·61
At Sea ...	1,100	867	1,967	·16	·13	·15
Not stated...	909	529	1,438	.....	.....	.....
All Countries ...	710,005	644,841	1,354,846	100·00	100·00	100·00

The natives of the British Empire resident in New South Wales, including of course the Australian born, numbered 1,316,097, or 97·24 per cent. of the whole population. The foreign born numbered 35,344, or 2·61 per cent. of the total. Of these, Europeans were the most numerous, comprising 21,273, or 60·2 per cent., Asiatics came next with 10,261, or 29·0 per cent., followed by Americans with 3,330, or 9·4 per cent., and Africans with 93, or ·3 per cent. The foreign countries which contributed the highest numbers to the population were the Chinese Empire, with 9,993; German Empire, 8,716; Sweden and Norway, 3,190; and the United States of America, 3,130.

The foreign born population are almost entirely adults, only 4 per cent. of the males and 11 per cent. of the females being under 21. The British born inhabitants are also largely composed of adults. The natives of New South Wales are most numerous at the younger ages, only 37·5 per cent. of the males and 38·6 per cent. of the females being over 21. Of the natives of the other Australian States a little more than two-thirds are adults.

The following statement shows the proportion per cent. of the population born in various countries at each census from 1861 to 1901 :—

Birthplaces.	1861.	1871.	1881.	1891.	1901.
New South Wales ... ..	45·80	58·55	62·16	64·58	72·20
Other Australian States and New Zealand ... ..	1·34	2·68	5·94	7·56	8·32
England and Wales ... ..	24·43	17·75	14·77	13·74	9·58
Scotland ... ..	5·21	3·99	3·35	3·28	2·27
Ireland ... ..	15·67	12·53	9·24	6·68	4·43
Other British Possessions ... ..	·99	·39	·50	·44	·44
Total, British Empire ... ..	93·44	95·89	95·96	96·28	97·24
German Empire ... ..	1·57	1·32	1·01	·85	·64
Other European Countries ... ..	·20	·18	·88	1·11	·93
Chinese Empire ... ..	3·71	1·43	1·36	1·17	·74
Other Foreign Countries ... ..	1·08	·90	·56	·41	·30
Total, Foreign Countries ... ..	6·56	3·83	3·81	3·54	2·61
At Sea ... ..	... *	·28	·23	·18	·15
All Countries ... ..	100·00	100·00	100·00	100·00	100·00

\* Not ascertained; included with "Other Foreign Countries."

It will be seen that the proportion of the Australian born has been steadily increasing, and the proportion of the foreign born steadily diminishing ever since 1861. The countries of the United Kingdom show large decreases.

At the date of the last enumeration there were living in the other five States and New Zealand 74,089 natives of New South Wales, and in New South Wales there were living 112,099 natives of the other States, so that the net gain to New South Wales of immigrants from other parts of Australasia was 38,010 persons. The distribution in each State was as follows :—

State.	Natives of each State living in New South Wales.	Natives of New South Wales living in each State.	Gain to New South Wales.	Loss to New South Wales.
Victoria.....	56,019	22,404	33,615	.....
South Australia.....	22,059	4,128	17,931	.....
Queensland.....	14,968	24,868	.....	9,900
New Zealand.....	10,589	6,492	4,097	.....
Tasmania.....	7,577	2,075	5,502	.....
Western Australia.....	887	14,122	.....	13,235
Total.....	112,099	74,089	61,145	23,135

As the table shows, New South Wales gained from Victoria, South Australia, Tasmania, and New Zealand, but lost to Queensland and Western Australia.

#### COLOURED ALIEN RACES.

The influx of Hindoos and other Eastern races had long caused a feeling of uneasiness, and restrictive legislation was already in force prior to the federation of the Australian States. One of the first measures passed by the Federal Parliament was the Immigration Restriction Act, which provided for the exclusion of any person who, when asked to do so, failed to write out and sign a passage of fifty words in a European language specified by an officer of the Customs. Other undesirable persons specified in the Act are prohibited from entering the Commonwealth. Under the Immigration Restriction Amendment Act of 1905, however, the dictation test was altered by the substitution of any prescribed language for a European language.

During the six years the Act has been in force, 1,143 persons have been refused admittance, of whom nearly 95 per cent. failed to pass the test. The number refused admittance in 1906 was 53, and in 1907, 62. The Act exempts persons in possession of certificates of exemption, His Majesty's land and sea forces, the master and crew of any public vessel of any Government, any person duly accredited by any Government, and any person who satisfies an officer of the Customs that he has been formerly domiciled in the Commonwealth.

The further immigration of Pacific Islanders to Australia is now prohibited by the Pacific Islands Labourers Act, which was passed in December, 1901. This Act was particularly directed against the continued employment of these aliens on the sugar plantations, and under its provisions all agreements for their employment terminated on the 31st December, 1906. Arrangements were made by the Commonwealth Government for the deportation of the Islanders already employed to their respective homes during 1907.

At the end of March, 1908, coloured labour was engaged in the sugar industry of the northern rivers as follows:—Clarence, 12; Richmond, 34; and Tweed, 317, making a total of 363 persons employed in New South Wales.

At the census of 1901 the number of coloured persons in New South Wales was 14,833, the country of birth being as follows. Aboriginal natives of Australia are not included:—

Birthplace	Males.	Females.	Total.
<b>Asiatics—</b>			
Chinese ... ..	10,063	159	10,222
Chinese half-castes ... ..	527	514	1,041
India and Ceylon ... ..	1,663	18	1,681
Japan ... ..	152	9	161
Syria ... ..	454	268	722
Other Asiatics ... ..	148	5	153
<b>Total Asiatics ... ..</b>	<b>13,007</b>	<b>973</b>	<b>13,980</b>
<b>Africans—</b>			
Egypt ... ..	13	6	19
Mauritius and the Seychelles ... ..	167	89	256
Algeria (Arabs) ... ..	89	...	89
Other Africans ... ..	16	6	22
<b>Total Africans ... ..</b>	<b>285</b>	<b>101</b>	<b>386</b>
<b>Polynesians and Melanesians—</b>			
New Caledonia ... ..	43	3	46
New Hebrides ... ..	46	2	48
Fiji ... ..	21	4	25
South Sea Islands (not otherwise described)	265	10	275
Other Polynesians ... ..	71	2	73
<b>Total Polynesians and Melanesians</b>	<b>446</b>	<b>21</b>	<b>467</b>
<b>Grand Total ... ..</b>	<b>13,738</b>	<b>1,095</b>	<b>14,833</b>

*Chinese.*—The most numerous of the coloured races was the Chinese, who constituted also the most important foreign element in the whole population. They were first attracted to the State by the gold discoveries. In 1901 they numbered 11,263, namely, 10,222 full bloods and 1,041 half-castes, and were nearly all males. The number of Chinese in the State at the date of each census from 1861 to 1901 was as follows:—

Census.	Males.	Females.	Total.	Proportion per cent. of total population.
1861	12,936	2	12,988	3·70
1871	7,208	12	7,220	1·43
1881	10,141	64	10,205	1·36
1891	13,555	601	14,156	1·26
1901	10,590	673	11,263	·83

Prior to 1891 the half-castes were not enumerated. It will be seen that there has been a gradual decrease since 1871 in the proportion of Chinese. From 1861 to 1871 the decline was probably due to the diminished gold yield and the discovery of richer fields in the neighbouring States. From 1891 to 1901 the results of the Chinese Restriction Act, which was passed in 1888, are evident. In 1887, the year before the passing of the Act,

the number of Chinese arriving in New South Wales was 4,436, in 1888 the arrivals were 1,848, but since that year the highest number was 176 in 1904. Acts to restrict the immigration of Chinese had also been passed in 1867 and 1881.

*Japanese.*—The Japanese may be considered next, although they are a very small part of the population, numbering only 152 males and 9 females. They were nearly all situated in Sydney and Newcastle, and were engaged as ship and house servants.

*Indians and Cingalese.*—The coloured natives of India and Ceylon numbered 1,681, and were almost entirely males, there being only 18 females. The number was swollen by the presence of 173 soldiers who had come from India to take part in the Commonwealth celebrations in January, 1901. The persons of these countries are to be found chiefly in the metropolis, where there were 705. In the farming and sugar-growing counties of Clarence and Rous there were 148 and 269 respectively. They are principally adults, the great majority being between the ages of 35 and 45. The Indians and Cingalese were principally hawkers, farm labourers, and lascars.

*Syrians.*—Of all the coloured races the Syrians show the greatest equality of sexes, there being 454 males and 268 females, and, unlike the others, they do not congregate so much in the city. About 50 per cent. of them are hawkers, who travel all over the State; the greater part of the remainder are storekeepers and drapers in the country.

#### ABORIGINES.

The aborigines of Australia form a distinct race, and it may be presumed that the whole of them throughout the continent sprang from the same stock, although it is remarkable that their languages differ so greatly that tribes within short distances are often quite unable to understand each other, and in fact almost every large community of natives has its own peculiar dialect. It is difficult to form a correct estimate of the numbers of the aborigines; but while there is reason to believe that some generations ago they were very numerous, there is ample evidence of late years that in many places they are decreasing.

It is recorded that Governor Phillip estimated the aboriginal population, about the year 1800, at one million; the number between Broken Bay and Botany Bay appearing to have been about 3,000. It is impossible to say how far this estimate was in accordance with fact; for at the time it probably did not seem an exaggerated conjecture, inasmuch as so large a number as 3,000 were found within the small area mentioned; yet, considering how small a portion of the territory was then explored by the early settlers, the statement was no doubt a fair estimate at a time when the data were very limited.

The aborigines were never properly enumerated until the census of 1891, when they were classed as full bloods and half-castes. In 1901 only full bloods and nomadic half-castes were counted. According to the Commonwealth Constitution Act, in reckoning the quota to determine the number of members to which each State is entitled in the House of Representatives, aboriginal natives of Australia are not to be counted. In reference thereto, the Federal Attorney-General decided that only full-bloods were aborigines within the meaning of the Act, and, consequently, half-castes in 1901 were included in the general population. In 1861 aborigines were not enumerated at all; in 1871 and 1881 the wandering tribes were passed over, and only those who were civilised or in contact with Europeans were enumerated and included in the general

population. The numbers included in the population at each census were:—

Census.	Males.	Females.	Total.
1871	709	274	983
1881	938	705	1,643
1891	4,559	3,721	8,280
1901	2,451	1,836	4,287

In 1891 the number of half-castes was 1,663 males and 1,520 females, or 3,183 total persons. In 1901 the number of both full-bloods and half-castes was 4,093 males, 3,341 females, 7,434 total persons. The number of nomadic half-castes was 509, comprising 259 males and 250 females.

The following statement shows the total number of aborigines and half-castes in New South Wales at the date of each census since 1861, the numbers for the first three periods being estimates:—

Year.	Number of Aborigines.
1861 ... ..	15,000
1871 ... ..	12,000
1881 ... ..	10,000
1891 ... ..	8,280
1901 ... ..	7,434

The aboriginal race is fast disappearing before the march of settlement, the annual rate of decrease being about 1 per cent. At the census of 1891 only 5,097 were of full blood, and this number, in 1901, had fallen to 3,778. The half-castes slightly increased. It is possible that some of the aborigines, especially those least civilised, escape being enumerated.

The number of aborigines under the control of the Aborigines Protection Board at the end of the year 1907 was 6,960, of whom 2,347 were full-bloods and 4,613 half-castes. This shows a decrease on the return for the end of 1906 of 156 full-bloods and an increase of 44 half-castes. The number of births reported during 1907 was 234 (183 of the children being half-castes), and the number of deaths, 177 (66 half-castes). There are nine stations, under the control of managers. These establishments, when first formed, were little more than camping grounds for the aborigines, where the blacks worked for their rations, and elementary instruction was imparted to the children; but now they have developed into settlements, with greatly improved huts for married couples, and adequate accommodation for teaching, duly qualified instructors having been appointed by the Department of Public Instruction. At the end of 1907 there were 289 full-blood aborigines and 942 half-castes living at the stations and camps under the control of Local Boards, and during the year 720 aboriginal children were receiving instruction in schools or privately. During the year a sum of £21,834 was expended on the aborigines. There are altogether in the State 156 reserves from sale for the aborigines, the total area being 25,122 acres.

#### NATURALISATION.

Up to the 31st December, 1903, certificates of naturalisation were granted to aliens in accordance with the Naturalisation and Denization Act of 1898; but with the passing of the Commonwealth Naturalisation Act this power was taken away from the State, and vested exclusively

in the Commonwealth Government. The Act came into operation on the 1st January, 1904. No letters or certificates of naturalisation granted in any State after the coming into operation of the Federal law are to have any effect.

Under the Commonwealth Act, any person who had, before the passing of the Act, obtained a certificate of naturalisation in any State is deemed to be naturalised. An applicant under this heading must produce, in support of his application, his own statutory declaration exhibiting his name, age, birth-place, occupation, residence, the length of his residence in Australia, and stating that he intends to settle in the Commonwealth, as well as a certificate signed by some competent person that the applicant is known to him and is of good repute.

It is also enacted that any person resident in the Commonwealth, not being a British subject, and not being an aboriginal native of Asia, Africa, or the islands of the Pacific, excepting New Zealand, who intends to settle in the Commonwealth, and who has resided in Australia continuously for two years immediately preceding the application, or who has obtained a certificate of naturalisation in the United Kingdom, may apply to be naturalised.

Under this clause an applicant must produce, in support of his application, his certificate of naturalisation and his own statutory declaration that he is the person named in the certificate, that he obtained it without fraud, that the signature thereto is genuine, and that he intends to settle in the Commonwealth.

The Governor-General, if satisfied with the evidence adduced, may in his discretion grant or withhold a certificate as he thinks most conducive to the public good, provided that he shall not issue the certificate until the applicant has taken the necessary oath of allegiance.

Any person to whom a certificate of naturalisation is granted is entitled to all political and other rights, powers, and privileges, and is subject to all the obligations of a natural-born British subject, provided that where, by the provisions of any State Act, a distinction is made between the rights of natural-born British subjects and those naturalised in the State, the rights conferred by the Commonwealth Act are only those to which persons naturalised by the State Act are entitled. Under the previously existing Act in New South Wales, aliens may hold and acquire both real and personal property, but may not qualify for any office, nor have any rights or privileges except such as are expressly conferred upon them.

Any alien woman who marries a British subject is deemed to be thereby naturalised. Any infant, not being a natural-born British subject, whose father has been naturalised, or whose mother is married to a natural-born British subject or to a naturalised person, and who has at any time resided in Australia with such father or mother, is also deemed to be naturalised.

On the whole, the conditions to be fulfilled under the Commonwealth Act do not differ greatly from those under the old State Act, but the term of residence necessary is now two years, whereas formerly it was five years. Under the Commonwealth Act, Asiatics, Africans, and Pacific Islanders are refused the rights of naturalisation; previously only the Chinese were so treated.

At the census of 1901 the number of naturalised foreigners was 3,619, comprising 3,265 males and 354 females. It is probable, however, that these numbers are under-stated. Germans have availed themselves most largely of the privileges of naturalisation, having taken out nearly one-half of the certificates granted.

The following table shows the nationalities of the persons naturalised during each of the last seven years, and up to the end of 1907 :—

Nationality.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Total to end of 1907.
German ... ..	153	108	109	412	170	154	163	4,935
Scandinavian ... ..	163	110	89	433	113	128	105	2,285
Russian ... ..	36	37	30	148	11	18	10	583
Italian ... ..	39	31	34	116	58	44	51	593
Other European ... ..	71	53	66	239	156	83	85	1,598
United States ... ..	10	6	3	26	10	20	16	206
China ... ..	...	...	...	...	...	...	...	908
Others ... ..	35	41	69	5	26	28	28	560
Total ... ..	507	386	400	1,379	544	475	459	11,668

There was a large increase in the number naturalised during 1904, the first year under the Commonwealth Act, by which the conditions were made somewhat easier; but in 1907 the number was largely reduced.

#### AREA.

The area comprised within the limits of New South Wales is estimated at 310,367 square miles, or 198,635,000 acres, being a little over two-and-a-half times that of Great Britain and Ireland. Excluding the surface covered by rivers and lakes, the area would be 195,669,000 acres, or about 305,733 square miles. Lord Howe Island, a dependency of New South Wales, situated about 300 miles east of Port Macquarie, has an area of 5 square miles.

The length of the State from Point Danger on the north to Cape Howe on the south, is 680 miles. From east to west, along the 29th parallel, the breadth is 760 miles, while diagonally from the south-west corner, where the Murray passes into South Australia, to Point Danger the length reaches 850 miles.

## VITAL STATISTICS.

## CONJUGAL CONDITION.

IN most countries the proportion of married to the total population is somewhat in excess of one-third. In New South Wales the proportion is slightly lower, as will be seen from the following statement, giving the number and proportion of each sex of each condition at the Census of 1901 :—

Conjugal Condition.	Number.			Proportion per cent.		
	Males.	Females.	Total.	Males.	Females.	Total.
Never married ... ..	484,250	402,326	886,576	68·49	62·43	65·61
Married ... ..	202,922	206,186	409,108	28·67	32·00	30·25
Widowed ... ..	19,451	35,207	54,658	2·75	5·46	4·04
Divorced ... ..	692	708	1,400	·09	·11	·10
Not stated ... ..	2,690	414	3,104	.....	.....	.....
Total ... ..	710,005	644,841	1,354,846	100·00	100·00	100·00

There are more married women than married men in the State owing probably to the absence of the husbands, and to the fact that a few women return themselves as married who are not really so. The large excess of widows over widowers is owing to the greater mortality among men, and to widowers re-marrying more often than widows. The proportion of never married is greater for males than for females.

The proportions per cent. of the never married, married, and widowed at each census from 1861 to 1901, were as shown below. The divorced are not shown on account of the smallness of the numbers, and because they were not enumerated prior to 1891 :—

Census.	Males.			Females.		
	Never Married.	Married.	Widowed.	Never Married.	Married.	Widowed.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1861 ... ..	69·34	28·23	2·43	61·09	35·14	3·77
1871 ... ..	69·96	27·59	2·45	62·89	32·82	4·29
1881 ... ..	70·64	26·93	2·43	63·52	31·75	4·73
1891 ... ..	69·78	27·41	2·78	62·87	32·11	5·00
1901 ... ..	68·49	28·67	2·75	62·43	32·00	5·46

The proportion of the never married of each sex increased at each census up to 1881, but decreased from 1881 to 1901. The married, as might be expected, showed a contrary tendency, for they decreased from 1861 to 1881; and while the males increased from 1881 to 1901, the females remained practically constant.

The average age of married people, as recorded at the census, was 43·44 years for husbands, and 39·05 years for wives, a difference of 4·39 years in favour of husbands. In 1891 the ages were respectively 41·43 and 36·96 years. The greatest number of married males at the time of the census was 34,469 at the age period 35 and under 40, whilst the greatest number of married females was 34,574 at the period 30 to 35. The following statement shows the relative ages of the husbands and wives who were together on the night of the census 1901. It appears that the number of such was 175,807. There were in addition 30,379 wives whose husbands were absent on the night of the census, and 27,115 husbands in similar circumstances as regards their wives. If these latter numbers are added to the number who were together the totals will represent the full number of married men and women in the State:—

Ages of Husbands.	Ages of Wives.													Total Husbands.
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 and over.	Not stated	
Under 20	61	30	1	..	..	..	..	..	..	..	..	..	..	92
20-24	1,108	3,995	823	96	20	7	..	..	..	..	..	..	3	6,062
25-29	727	7,518	8,725	1,535	241	34	8	2	..	..	..	..	2	18,792
30-34	230	3,562	10,916	9,670	1,724	230	59	13	4	1	..	..	13	26,472
35-39	72	1,239	5,411	11,534	10,136	1,843	292	62	8	1	..	..	15	30,613
40-44	17	406	1,739	5,076	10,204	8,135	1,420	243	53	8	3	..	14	27,321
45-49	8	114	501	1,444	4,175	7,215	5,444	1,013	200	47	12	6	16	20,195
50-54	4	37	162	462	1,319	3,187	4,724	3,892	668	166	42	11	7	14,701
55-59	..	7	52	171	473	1,265	2,314	3,621	2,864	558	118	22	7	11,472
60-64	1	8	30	89	211	504	877	1,637	2,582	1,968	400	107	4	8,477
65-69	1	7	8	39	88	184	262	667	1,347	1,740	1,432	314	1	6,471
70 and over	..	2	12	15	51	92	131	314	559	981	1,460	1,718	3	5,335
Not stated	1	7	11	8	12	5	5	1	2	..	..	..	62	114
Total Wives	2,230	16,932	28,385	30,130	23,654	22,751	15,635	11,515	8,307	5,470	3,476	2,175	147	175,807

From these figures it will be seen that the married females are greatly in excess of the married males at the earlier ages, but at the later ages they are considerably in the minority. The numbers of wives in the three groups between ages 25 and 40 are very nearly equal, and together these ages embrace 48·65 per cent. of all the married women. Of the males 47·07 per cent. are included between ages 30 and 45.

The majority of marriages were contracted between people of suitable ages, though there were, nevertheless, several anomalies. The greater number of married women were mated with husbands five years their senior, and there does not appear any decided tendency of a particular age to mate with ages showing abnormal disproportions. The husbands whose ages exceeded those of their wives by five years and under numbered 62,532, while husbands having wives of a similar age-period numbered 57,162. The next group, viz., husbands having wives from five to ten years younger, exhibits only 28,742, while curiously enough the next place is taken by 10,475 husbands, the ages of whose wives were higher than their own by five years and under.

Of all the married couples in New South Wales, as many as 74·13 per cent. show no greater disparity than five years between the ages of husband and wife. The husbands from 10 to 15 years older than their wives numbered 9,528, and those from 15 to 20 years older, 3,227.

It is eminently undesirable from a sociological point of view that marriages should be contracted between persons of immature age. In New South Wales there is no limit fixed by law as the marriageable age, but the Act regulating marriages provides that the guardian's consent must be obtained in the case of minors. Boys occasionally marry in New South Wales at 16, and girls at 13 or even 12, but happily such occurrences are rare, for few males contract marriage before 21, and not many females before 18. The census returns reveal the fact that the young males under 21 manifest a decided preference for partners about their own period of life, whereas the wives under 18 generally marry husbands between 21 and 30; but it is a matter of common knowledge that many of these very early marriages are compulsory unions. Of the husbands under 21, no less than 370 were living with their wives, and 41 of these were married to girls under 18. Of the latter, 2 were aged 18, 11 were aged 19, and 28 aged 20. The total wives under 18 living with their husbands at the census were 304.

# BIRTHPLACES OF HUSBANDS AND WIVES.

The following statement exhibits the number of husbands and wives of various nationalities living in the State at the census of 1901:—

Birthplaces of Husbands.	Birthplaces of Wives.													Total Husbands.
	New South Wales.	Other Australian States.	England and Wales.	Scotland.	Ireland.	Other British Possessions.	Germany.	France.	Other European Countries.	United States of America.	Other Foreign Countries.	At Sea.	Not stated.	
New South Wales .. ..	69,115	5,670	5,265	949	2,308	148	166	24	55	134	10	173	24	84,041
Other Australian States ..	7,644	7,567	1,489	325	552	53	63	12	23	43	7	46	6	17,840
England and Wales .. ..	15,743	4,308	16,802	1,209	2,260	170	133	59	88	196	13	119	12	41,042
Scotland .. ..	3,160	942	1,241	3,154	627	47	31	8	10	26	4	39	1	9,281
Ireland .. ..	4,789	977	977	284	6,959	42	30	10	12	27	1	25	8	14,141
Other British Possessions ..	534	159	200	37	81	82	4	8	2	7	4	8	..	1,126
Germany .. ..	1,019	350	360	59	240	8	768	4	34	9	1	7	5	2,864
France .. ..	171	52	62	17	41	3	8	30	16	2	1	2	..	455
Other European Countries ..	1,211	347	479	97	301	9	63	7	636	12	5	12	4	3,183
United States of America ..	338	101	116	27	56	15	7	..	2	63	2	3	..	730
Other Foreign Countries ..	220	67	46	7	15	1	3	3	2	2	62	..	1	429
At Sea .. ..	320	82	73	13	43	..	4	1	1	3	2	11	..	553
Not stated .. ..	29	6	12	1	6	..	..	..	..	..	..	1	67	122
Total Wives .. ..	104,293	29,628	27,132	6,179	13,569	578	1,280	216	361	484	112	437	123	175,807

The married males born in New South Wales comprised 46·83 per cent. of the total number; those of Australian birth generally comprised 57·13 per cent. Similarly, wives born in New South Wales formed 58·96 per cent. of the married females, and those of Australian birth 70·89 per cent. After the Australian born, the English were the most numerous, then the Irish and Scotch. Wives of foreign extraction formed only 1·70 per cent. of the married females.

The wives of Australian birth, as might be anticipated, are mostly young women. Those born outside New South Wales are older, many of them being

the survivors of those who emigrated years ago. At the census of 1901 the ages of the married women of the principal birthplaces were as follows :—

Age Group.	Birthplace.							Total.
	New South Wales.	Other Australian States.	England and Wales.	Scotland.	Ireland.	Other Countries.	Not stated.	
Under 15 ...	2	.....	.....	.....	.....	.....	...	2
15—19 ..	2,151	255	89	23	3	38	3	2,562
20—24 ...	15,062	2,560	1,261	266	164	265	13	19,591
25—29 ...	23,395	4,796	2,604	510	703	516	19	32,548
30—34 ...	23,195	5,529	3,064	641	1,565	564	16	34,574
35—39 ..	20,029	4,994	3,930	163	2,440	696	26	33,083
40—44 ...	15,030	3,709	4,284	1,014	2,166	634	20	26,887
45—49 ...	9,161	1,627	4,729	1,045	1,520	634	19	18,735
50 and over ...	13,337	1,086	11,844	2,780	7,560	1,364	32	38,003
Not stated ...	99	22	19	7	17	3	34	201
Total ...	121,461	24,578	31,824	7,284	16,143	4,714	182	206,186
Per cent. ...	58·90	11·92	15·43	3·54	7·83	2·29	·09	100·00

From this it may be seen that, although wives of Australian birth comprised 71 per cent. of the whole, those aged 40 and over were less than 53 per cent. of all married women of those ages. Irishwomen were much the oldest, about 47 per cent. of them being over 50. It is therefore apparent that, unless there is a very large influx of immigrants in the near future, the mothers of Australian birth will have most influence on future generations.

#### RELIGIONS OF HUSBANDS AND WIVES.

The number of married men and women professing the principal religions, at the census of 1901, were as follows :—

Religions of Husbands.	Religions of Wives.										Total Husbands.
	Church of England.	Roman Catholic.	Methodist.	Presbyterian.	Congregationalist.	Baptist.	Other Christian.	Jew.	Others.	Not stated.	
Church of England ..	70,550	8,043	1,738	2,078	303	280	325	67	103	19	83,506
Roman Catholic ..	4,867	31,497	387	544	60	36	121	17	44	7	37,580
Methodist ..	1,485	548	16,536	322	62	107	126	2	25	3	19,216
Presbyterian ..	2,719	1,196	424	13,742	67	13	86	11	19	1	18,348
Congregationalist ..	393	101	83	66	2,984	44	20	1	9	..	3,701
Baptist ..	275	52	110	65	32	1,856	26	..	3	..	2,419
Other Christian ..	694	405	220	135	46	44	3,340	2	28	3	4,917
Jew ..	151	62	13	13	2	1	6	781	4	1	1,034
Others ..	1,415	780	397	280	79	92	124	8	1,781	5	4,961
Not stated ..	20	13	2	3	2	1	3	..	1	80	125
Total Wives ..	82,569	42,697	19,910	17,248	3,637	2,544	4,177	889	2,017	119	175,807

The proportions of the married belonging to the principal religions agree fairly closely with those in the general population. The Roman Catholic and "Other Christian" religions both show less proportions than in the general population, while the other religions specified show slightly higher proportions. In considering this table it should be borne in mind that "Other

Christian" sects embrace members of the Unitarian body, and adherents of the Salvation Army, and that the last of the series covers not only all other religions, but freethinkers, agnostics, and infidels, besides those who did not profess attachment to any denomination, and those who objected to state the nature of their religious belief. The religion of both husband and wife was ascertained in regard to 172,931 couples, and proved to be the same in 141,918 instances—a proportion of a little over 82 per cent.

## MARRIAGES.

The number of marriages celebrated in New South Wales during 1907 was 12,189, corresponding to a rate of 7·84 per 1,000 of the population. The number is the highest on record, and the rate is the highest since 1886.

The following table shows the average annual number of marriages and the rates per 1,000 of the population during each quinquennium of the last thirty-eight years:—

Period.	Average Number of Marriages.	Rate per 1,000 of Population.	Period.	Average Number of Marriages.	Rate per 1,000 of Population.
1870-74	4,091	7·77	1895-99	8,700	6·74
1875-79	4,987	7·88	1900-04	10,240	7·33
1880-84	6,738	8·39	1905	10,970	7·42
1885-89	7,679	7·67	1906	11,551	7·63
1890-94	7,954	6·80	1907	12,189	7·84

Up to the year 1891 the increase in the number of marriages celebrated was remarkably steady, very few checks being experienced, but in 1892 there was a sudden decline, which continued until 1895, when the figures again took an upward movement, but the proportion married per 1,000 of the population did not reach the 1891 level until 1900. In 1901 the rate was the highest since 1886, but in the next two years it again declined largely. Since 1903, however, there has been a constant improvement.

A more exact method of stating the marriage rate is to compare the marriages with the number of marriageable males and females in the community, since the marriage rate is mainly a function of age. As stated elsewhere, however, it has not been considered advisable to make any estimates of the number living at various ages on account of the long interval since the last census.

The following statement shows the marriage rate per 1,000 of the population in each State of the Commonwealth, New Zealand, and in a number of European countries during the last six years:—

State.	1902- 1906.	1907.	Country.	1901- 1905.	1906.
New Zealand	8·26	8·91	Hungary	8·6	8·7
Western Australia	9·00	8·02	Prussia	8·1	8·2
South Australia	6·78	7·99	Belgium	8·1	8·0
Tasmania	7·59	7·92	England and Wales	7·8	7·8
New South Wales	7·33	7·84	France	7·6	7·8
Victoria	6·92	7·68	Italy	7·4	7·8
Queensland	7·46	7·58	Netherlands	7·4	7·4
			Scotland	7·0	7·0
			Norway	6·1	5·9
			Ireland	5·2	5·1

It will be seen that New Zealand has the highest rate in Australasia, followed by Western Australia, South Australia, Tasmania, and New South Wales in the order mentioned, with Queensland last on the list. In 1907 in all the States the rates showed a decided improvement, with the exception of Western Australia.

A comparison of the marriage-rates of various countries is apt to be misleading, on account of the different conditions of life prevailing, and the varying number of marriageable persons therein. The figures show that in Europe, as in New South Wales, the marriage rate has been increasing. In the majority of cases the rate is equal to or higher than in New South Wales.

#### MARK SIGNATURES.

The number of persons signing the marriage register with marks has steadily declined for many years past. In 1870 the proportion of signatures made with marks was as high as 18·23 per cent. of the whole, while in 1907 the percentage had fallen to ·85, the decrease in illiteracy being, therefore, highly satisfactory. The amount of illiteracy, as displayed by inability to sign the marriage register in the proper manner, was for many years greater amongst females than amongst males, the returns showing that this was the case in every year from the commencement of registration to 1887. This order of things was then reversed, although in three years since there has been a slightly greater proportion of mark signatures by females. In 1870 the number of women who were unable to sign their names amounted to over one-fifth of the whole number married, but the proportion had fallen to one-hundredth in 1907. During the same period the male illiterates fell from 145 to 10 per 1,000 of the number of males married:—

Year.	Males signing with marks, per 1,000.	Females signing with marks, per 1,000.	Year.	Males signing with marks, per 1,000.	Females signing with marks, per 1,000.
1870-74	129	170	1895-99	19	17
1875-79	86	105	1900-04	12	12
1880-84	54	68	1905	11	12
1885-89	37	40	1906	10	9
1890-94	27	25	1907	10	7

#### MARRIAGES, IN RELIGIONS.

Of every hundred marriages celebrated in New South Wales, about ninety-seven are solemnised by the clergy (including those officiating at Matrimonial Agencies). The actual figures for 1907 show that during that year 11,924 marriages were solemnised by clergy and 265 witnessed by registrars, giving the proportions of 97·8 per cent. and 2·2 per cent. respectively of the total number of 12,189.

The Church of England celebrates the largest number of marriages, the Roman Catholic Church coming next, followed by the Methodist and Presbyterian Churches. "Matrimonial Agencies" are institutions which have come into existence during the last ten years, and which combine the easy formalities of a district registrar's office with the attendance of a clergyman.

There was a large decrease in the number of marriages celebrated at these "agencies" in 1907, the total being only 92 as against 732 in 1906. Coincident with this decline there was an increase of 403 in the number of "Whitefield" Congregationalists (included with "all other sects" in the table) and 259 by the Church of England.

The following table shows the number and proportion per cent. of marriages registered by the principal denominations during 1907, in comparison with the preceding five years:—

Denomination.	Marriages, 1902-1906.	Proportion per cent.	Marriages, 1907.	Proportion per cent.
Church of England ...	19,414	36.50	4,649	38.14
Roman Catholic ...	9,611	18.07	2,201	18.06
Presbyterian ...	7,055	13.26	1,566	12.85
Methodist ...	6,912	12.99	1,571	12.89
Congregationalist...	2,099	3.95	434	3.56
Baptist ...	914	1.72	268	2.19
Hebrew ...	138	0.26	18	0.15
All other Sects ...	1,843	3.47	1,125	9.23
Matrimonial Agencies ...	3,825	7.19	92	0.75
District Registrars ...	1,377	2.59	265	2.18
Total Marriages ...	53,188	100.00	12,189	100.00

In 1907 the denominations which showed an increase as compared with the previous five years were Church of England, Congregationalist, Baptist, and Registrar. The largest increase was in the group including sects not specially distinguished, the reason being the inclusion of the "Whitefield" Congregationalists mentioned above.

#### CONDITION BEFORE MARRIAGE.

During the year 1907, of the males married, 11,386 were bachelors, 737 were widowers, and 66 were divorced. Of the females, 11,442 were spinsters, 648 were widows, and 99 were divorced. The proportion of males re-married was 6.6 per cent., and of females 6.1 per cent.

The following table shows at quinquennial intervals since 1881 the proportion of first marriages and re-marriages per 10,000 males and females respectively:—

Period.	Bachelors.	Widowers and Divorced Men.	Spinsters.	Widows and Divorced Women.
1881	9,987	913	9,044	956
1886	9,137	863	9,156	844
1891	9,229	771	9,216	784
1896	9,184	816	9,172	828
1901	9,270	730	9,268	732
1906	9,262	738	9,352	648
1907	9,341	659	9,387	613

From this it appears that the proportion of persons re-marrying has declined both among widowers and widows by about one-third since the earliest period in the table. There was a rise in the proportion between 1891 and 1896, which was followed by a larger fall during the next five years, so that the proportion of remarriages was lower in 1901 than in 1891.

## AGE AT MARRIAGE.

Of the 12,189 couples married in 1907, the ages of 12,184 bridegrooms and of 12,183 brides are known. An examination of the figures shows that in 75·3 per cent. of the marriages the husband was older than the wife; in 9·2 per cent. the ages of the contracting parties were the same; while in the remaining 15·5 per cent. of the unions the bride was older than the bridegroom.

The results of a tabulation of the respective ages of bridegrooms and brides in 1907 are shown in the following table:—

Ages of Bridegrooms.	Ages of Brides.												Total.
	Under 18.	18.	19.	20.	21 — 24	25 — 29	30 — 34	35 — 39	40 — 44	45 — 49	50 and over.	Not stated	
Under 18 years ..	5	3	1	1	1	..	..	..	..	..	..	..	11
18 years.. ..	20	22	11	7	10	1	..	..	..	..	..	..	71
19 „ .. ..	32	35	45	14	33	3	..	..	..	..	..	..	162
20 „ .. ..	44	66	53	48	96	19	1	1	..	..	..	..	333
21—24 .. ..	261	316	430	422	1,789	327	55	10	2	1	..	..	3,612
25—29 .. ..	103	161	240	270	1,747	1,183	197	61	14	1	..	1	3,978
30—34 .. ..	33	34	72	79	554	684	317	74	20	4	..	..	1,871
35—39 .. ..	12	15	32	29	211	340	219	130	39	10	5	1	1,043
40—44 .. ..	3	4	9	3	72	102	98	86	65	23	4	1	470
45—49 .. ..	2	..	1	1	23	58	48	55	53	36	14	..	291
50 and over ..	..	1	1	3	13	39	34	45	53	54	99	..	342
Not stated ..	..	..	..	..	1	..	1	..	..	..	..	2	5
Total .. ..	515	657	900	877	4,549	2,756	970	462	246	129	122	6	12,189

The following statement shows the average age at marriage of both bridegrooms and brides for each of the last ten years. The difference between the ages at marriage of males and females is a little over four years, the males being the older.

Year.	Average age of Bridegrooms.	Average age of Brides.	Year.	Average age of Bridegrooms.	Average age of Brides.
	Years.	Years.		Years.	Years.
1898	29·53	24·99	1903	29·20	25·04
1899	29·31	24·98	1904	29·00	24·93
1900	29·15	25·03	1905	29·13	24·96
1901	29·08	24·91	1906	29·23	25·08
1902	29·25	25·03	1907	29·20	25·20

The average age at marriage, both of bridegrooms and brides, has remained practically constant during the last ten years, although there has been a slight tendency to a lower average on the part of bridegrooms.

The above figures relate to all persons marrying during the year, and include those re-marrying. The average ages of those marrying for the first time during 1907 were, of bachelors 28·3 years, and of spinsters 24·5 years, or about 11 months lower in the case of bridegrooms and eight months lower in the case of brides.

## MARRIAGE OF MINORS.

The number of persons under 21 years of age married during 1907 was 3,526, or 14·5 per cent. of the total. The proportion of bridegrooms who were minors was 4·7 per cent., and of brides 24·2 per cent. In both cases the figures are high, and above the average. The figures for the last ten years are appended:—

Year.	Minors.		Percentage of—	
	Bridegrooms.	Brides.	Bridegrooms.	Brides.
1898	242	2,110	2·72	23·74
1899	262	2,202	2·82	23·74
1900	294	2,297	2·94	22·98
1901	351	2,546	3·33	24·16
1902	309	2,372	2·95	22·62
1903	320	2,249	3·28	23·05
1904	395	2,506	3·79	21·05
1905	434	2,654	3·96	24·19
1906	497	2,837	4·30	24·56
1907	577	2,949	4·73	24·19

An examination of the records for the last thirty years shows that the proportion of minors marrying is increasing both among bridegrooms and brides.

## BIRTHS.

The number of births during 1907 was 42,195, equal to a rate of 27·14 per 1,000 of the total population. The actual number of births was the highest ever recorded, but the rate was lower than the average for the preceding ten years. The birth-rate, which fell away sharply after 1888, has been declining more or less ever since, and is now 27 per cent. below the figure for that year. The following table shows the average annual number of births and birth-rate per 1,000 of the total population in quinquennial periods since 1870:—

Year.	Births.	Birth-rate per 1,000 of Population.	Year.	Births.	Birth-rate per 1,000 of Population.
1870-74	20,733	39·36	1895-99	37,042	28·68
1875-79	24,388	38·51	1900-04	37,498	26·85
1880-84	30,417	37·89	1905	39,501	26·71
1885-89	36,877	36·85	1906	40,948	27·04
1890-94	39,550	33·80	1907	42,195	27·14

These rates are based on the total population—that is, not taking into consideration either the age or sex distribution. It is unsatisfactory, for several reasons, so to measure the birth-rate; a preferable method, and one often adopted, is to calculate the number of legitimate births per 1,000 married women of reproductive ages (from 15 to 45). Unfortunately, however, the number of persons living in various age groups is ascertained only at the census. In intervening years it is necessary to make an estimate, which becomes less reliable as the period from the census increases. Estimates of sections of the population depend on a double assumption, and are therefore still less reliable. It has, therefore, been considered inadvisable to make any estimate for so late a period as 1907, which is seven years from the last census, but up to the time of that census the rates based on the number of married women show similar results to that in the above table, except that proportionately the decline since 1888 is greater than shown there.

The birth-rate per 1,000 of the population of each State of the Commonwealth, of New Zealand, and of a number of European countries, during the last six years, is given in the following table:—

State.	1902-1906.	1907.	Country.	1904-1906.	1906.
Tasmania ... ..	29·19	29·63	Hungary ... ..	37·2	36·0
Western Australia ...	30·24	29·24	Prussia... ..	34·8	33·7
New Zealand ... ..	26·77	27·30	Italy ... ..	32·6	31·9
<i>New South Wales</i> ...	<i>26·59</i>	<i>27·14</i>	Netherlands ...	31·5	30·4
Queensland ... ..	26·39	26·87	Scotland ... ..	28·9	27·9
Victoria ... ..	24·85	25·16	England and Wales ...	23·1	27·1
South Australia ... ..	24·12	23·97	Norway ... ..	28·6	26·5
			Belgium ... ..	27·7	25·7
			Ireland... ..	23·6	23·6
			France ... ..	21·1	20·6

In Australasia South Australia has the lowest and Tasmania the highest rate. The comparatively high rate in the Western State is due to the larger proportion of married women of child-bearing ages in its population. Generally the decline, which has characterised the birth-rates not only of Australian but also of European countries, has continued. The birth-rate for Australia is lower than in most of the countries of the old world, but, as is shown in another place, this is more than counteracted by a much lower death-rate.

#### BIRTH-RATES—METROPOLIS AND COUNTRY.

If the State be divided into the metropolitan and country districts, there were during 1907, in the former, 14,334 births, and in the latter 27,861, corresponding to rates of 25·30 and 28·19 per 1,000 of population respectively. The country has shown a higher rate than the metropolis since 1893, but prior to that year the contrary was the case:—

Year.	Number of Births.			Births per 1,000 of Population.		
	Metropolis.	Country.	New South Wales.	Metropolis.	Country.	New South Wales.
1880-84	49,058	103,026	152,084	40·16	36·90	37·89
1885-89	65,866	118,517	184,383	41·50	34·69	36·85
1890-94	68,754	128,998	197,752	34·11	33·63	33·80
1895-99	61,224	123,986	185,210	26·73	29·75	28·68
1900-04	63,694	123,795	187,489	25·20	27·78	26·85
1905	13,769	25,732	39,501	25·95	27·14	26·71
1906	13,984	26,964	40,948	25·66	27·82	27·04
1907	14,334	27,861	42,195	25·30	28·19	27·14

The highest rate exhibited for the whole of New South Wales during the last twenty years was 37·20 in 1888. The maximum rate for the metropolis was reached in 1886, when the births were 43·70 per thousand of the population. In the country districts the greatest number of births in proportion to the population occurred in 1888, when the rate was 35·35 per thousand.

The rate has been declining in both districts since the earliest period, but not to the same extent in the country as in the metropolis. In the metropolis there was a heavy fall from 1889 to 1894; and again from 1894 to 1899; in the country there was a corresponding fall, but it began earlier than in the metropolis. During the last three years the rate has declined in the metropolis and increased in the country districts.

SEXES OF CHILDREN.

Of the 42,195 children born during the year, 21,616 were males and 20,579 were females, the proportion being 105 males to 100 females; and in no year, so far as observation extends, have the female births exceeded in number those of males, although the difference has sometimes been very slight. The preponderance of births of male children in New South Wales during a number of years will be seen from the table given below. The figures are exclusive of children stillborn, the births of which are not required to be registered:—

Year.	Males.	Females.	Persons.	Year.	Males.	Females.	Persons.
1870-74	10,577	10,156	20,733	1895-99	18,979	18,063	37,042
1875-79	12,477	11,911	24,388	1900-04	19,134	18,364	37,498
1880-84	15,567	14,850	30,417	1905	20,206	19,295	39,501
1885-89	18,898	17,979	36,877	1906	21,066	19,882	40,948
1890-94	20,324	19,226	39,550	1907	21,616	20,579	42,195

The excess of males over females born during the past thirty years has ranged from 2 per cent. in 1876 and 1901, to 8 per cent. in 1889, the average being 5·3 per cent.

The following table shows the number of males born to every 100 females, both in legitimate and illegitimate births during the last thirty-eight years:—

Year.	Legitimate Births.	Illegitimate Births.	All Births.	Year.	Legitimate Births.	Illegitimate Births.	All Births.
1870-74	104·3	101·0	104·1	1895-99	105·0	105·4	105·1
1875-79	104·6	108·8	104·8	1900-04	104·3	102·8	104·2
1880-84	104·9	103·9	104·8	1905	104·9	102·5	104·7
1885-89	105·4	98·8	105·1	1906	106·2	103·1	106·0
1890-94	105·7	105·4	105·7	1907	105·0	105·3	105·0

Generally speaking, in illegitimate births there is a greater equality of the sexes than in legitimate, and in some years they actually show a majority of female children, such instances having occurred three times during the last twenty years. It is a curious coincidence that the proportion of males born out of wedlock was abnormally low in 1886, and abnormally high in 1901, while the reverse was the case in regard to legitimate births in those years.

ILLEGITIMACY.

The number of illegitimate births in 1907 was 2,969, equal to 7·04 per cent. of the total births. A statement of the illegitimate births in New South Wales, distinguishing metropolitan and country districts since 1880, is given below, and taking the whole period over which the table extends, it will be seen that the proportion has constantly increased throughout the State, notably in the city and suburbs of Sydney:—

Year.	Number of Illegitimate Births.			Percentage of Total Births.		
	Metropolis.	Country Districts.	New South Wales.	Metropolis.	Country Districts.	New South Wales.
1880	551	365	1,226	6·72	3·36	4·23
1890	1,036	995	2,031	7·81	3·91	5·26
1900	1,222	11,383	2,605	10·08	5·53	7·61
1905	1,530	11,382	2,912	11·11	5·37	7·37
1906	1,457	1,425	2,882	10·42	5·28	7·04
1907	1,546	1,423	2,969	10·79	5·41	7·04

It is possible that the smaller proportion of illegitimate births noticeable in the country districts is caused by natural gravitation of mothers to the metropolis, and the presence of maternity hospitals in the capital.

The method of stating the illegitimate as a proportion of the total births is, however, somewhat erroneous, because the illegitimate births have no necessary relation to the legitimate births, and because they are compared with a standard which has been declining for several years, and which is likely to vary under any conditions. The proportion of illegitimate to legitimate births has increased because the number of legitimate births relatively to the population has decreased largely.

A much more satisfactory, because more exact method, is to compare the births with the number of unmarried females of the reproductive ages. As stated previously, however, it is not advisable to do this at the present time. In place of the rate based on the number of unmarried females, that based on the whole population is given in the following statement at quinquennial intervals since 1881.

Year.	Illegitimate Births per 1,000 of Population.	Year.	Illegitimate Births per 1,000 of Population.
1881	1.65	1901	1.98
1886	1.74	1905	1.96
1891	1.85	1906	1.90
1896	1.92	1907	1.91

According to these figures illegitimacy very slowly increased up to 1901, since when it has declined. The impression conveyed by the method of the preceding table of comparing the illegitimate with the total births is thus removed.

Illegitimacy is a social evil, and the following figures show with what calamitous results it is attended. The table appended gives, for 1907, and for the five years preceding, the death-rates of illegitimate children under 1 and under 5 years of age, as compared with legitimate children of like ages:—

Age.	Legitimate.		Illegitimate.		Total.	
	Deaths	Rate per 1,000 living.	Deaths.	Rate per 1,000 living.	Deaths.	Rate per 1,000 living.
Under 1 year—						
1902-1906	14,587	81.28	2,955	219.55	17,542	90.93
1907	3,211	81.86	529	178.17	3,740	88.63
Under 5 years—						
1902-1906	20,061	25.99	3,386	72.49	23,447	28.65
1907	4,377	26.79	648	59.61	5,025	28.84

It will be seen how unfavourable is the position, and how small is the chance of living of the illegitimate child as compared with the legitimate. At each age the death-rate of the illegitimate is more than twice that of the legitimate. In 1907 one-fifth of the illegitimate children born did not live through the first year.

An Act to legitimise children born before marriage on the subsequent marriage of their parents was passed in 1902. Under the provisions of this Act such children are deemed to be legitimate on registration, and are entitled to the status of children born in wedlock. In all 950 such registrations have been made, 6 in 1902, 158 in 1903, 173 in 1904, 175 in 1905, 191 in 1906, and 247 in 1907, the number having increased each year.

## PLURAL BIRTHS.

During the year 1907 there were four cases of triplets, comprising 4 males and 8 females, and 399 cases of twins, comprising 407 males and 390 females—in all, 797 children, one born dead not being included. Of the 403 cases of plural births during 1907, 383 were legitimate and 20 illegitimate. The number of children born as triplets and twins formed 1·29 per cent. of the total births.

The following table shows the number of cases of twins, triplets, and quadruplets born in New South Wales during the fifteen years 1893–1907, excluding those stillborn, and distinguishing legitimate and illegitimate:—

Cases of—	Legitimate.	Illegitimate.	Total.
Twins ... ..	5,520	293	5,813
Triplets ... ..	53	3	56
Quadruplets ... ..	3	...	3

The total number of confinements recorded during the fifteen years was 568,714. It follows, therefore, that at per 1,000,000 confinements there were 10,221 cases of twins, 98 cases of triplets, and 5·3 cases of four children at a birth. Stated in another way, there were 10·3 plural births in every 1,000 total births.

The smallest proportion of plural births is found amongst women below age 20; the proportion increases steadily with the age of the mothers until it reaches a maximum with women between the ages of 35 and 40 years, after which there is a decline, but the decline does not bring the ratio back to its starting-point, for at ages 45 to 50 the plural births are 1 to every 109 confinements recorded, whereas at age 20 and under the proportion is 1 to 197.

The results of the observations for the fifteen years 1893–1907 will be found in the following table; the figures refer to legitimate births only:—

Age Group of Mothers.	All Births.	Plural Births.	Plural Births per 1,000 of all Births.
Under 20 years ... ..	20,274	103	5·08
20–24 „ ... ..	118,750	760	6·41
25–29 „ ... ..	149,261	1,437	9·62
30–34 „ ... ..	120,731	1,598	13·24
35–39 „ ... ..	84,177	1,234	14·66
40–44 „ ... ..	33,079	412	12·46
45 years and over... ..	3,480	32	9·20

It is a remarkable fact that of 5,576 plural births, 3,276 occurred to mothers whose ages were 30 years or upwards; this gives a proportion of 59 per cent., whereas of all legitimate births only 46 per cent. occurred at those ages.

## NATURAL INCREASE.

The excess of births over deaths, or as it is called the “Natural Increase,” was 25,785 in 1907, and is, with the exception of 1906, the highest yet recorded. The excess of births over deaths does not show a steady increase or decrease, but fluctuates somewhat, as might be expected. In the whole State during the twenty-eight years from 1880 to 1907, the least excess was 16,886 in 1882, and the highest 25,973 in the year 1906. In the metropolis the least excess was in 1880, viz., 3,434, and the highest in 1892, when the

number reached 8,558. In the country districts the number ranged from 12,278 in 1882 to 17,692 in 1906:—

Year.	Metropolis.	Country Districts.	New South Wales.			Increase Per cent. of population at end of previous year.
			Males.	Females.	Persons.	
1898	5,550	14,011	9,087	10,474	19,561	1.48
1899	6,728	13,832	9,482	11,078	20,560	1.55
1900	6,625	15,403	10,013	12,015	22,028	1.64
1901	6,404	15,450	9,822	12,032	21,854	1.60
1902	7,065	14,124	9,787	11,402	21,189	1.54
1903	6,836	12,633	8,949	10,520	19,469	1.38
1904	7,540	15,767	11,124	12,183	23,307	1.63
1905	7,999	16,524	11,497	13,026	24,523	1.68
1906	8,281	17,692	12,351	13,622	25,973	1.74
1907	8,096	17,659	12,187	13,598	25,785	1.68

The natural increase is now  $1\frac{3}{4}$  per cent., as against  $2\frac{1}{4}$  per cent. twenty years ago, the falling-off being entirely due to the decline in the birth-rate, as there has been a constant improvement in the death-rate.

Although the males born are more numerous than the females, the actual increase of population from the excess of births over deaths is greatly in favour of the females. The male population exceeds the female, and there is a correspondingly larger number of deaths of males. There is also a greater mortality amongst male than amongst female children, and from this cause alone the natural excess of male births is almost neutralised. During the ten years which closed with 1907 the number of females added to the community by excess of births exceeded the males by 15,659, or 13 per cent.

The rate of natural increase in New South Wales is low as compared with that of twenty years ago, nevertheless it is exceeded by no country outside Australasia, as will be seen from the following table. The figures represent the birth and death rates, and the difference between them (the natural increase) per 1,000 of population in each country—in the Australian States and New Zealand for 1907, and in the majority of the other countries for 1906:—

Country.	Birth-rate.	Death-rate.	Natural Increase	Country.	Birth-rate.	Death-rate.	Natural Increase.
Tasmania ...	29.7	11.2	18.5	Victoria ...	25.2	11.7	13.5
Western Australia	29.2	11.1	18.1	German Empire (1905)	33.0	19.8	13.2
New South Wales...	27.1	10.5	16.6	Scotland ...	27.9	16.0	11.9
Queensland ...	26.9	10.3	16.6	England and Wales ...	27.1	15.4	11.7
New Zealand ...	27.3	11.0	16.3	Italy ...	31.9	20.8	11.1
Russia (1901) ...	47.9	32.1	15.8	Switzerland ...	27.4	17.9	9.5
Netherlands ...	30.4	14.8	15.6	Austria (1905) ...	33.7	25.0	8.7
Denmark ...	28.5	13.5	15.0	Spain ...	34.1	26.2	7.9
South Australia ...	24.0	9.7	14.3	Ireland...	23.6	17.0	6.6
Roumania...	38.6	25.0	13.6	France ...	20.6	19.6	1.0

It will be seen that the countries with the highest birth-rate have not necessarily the highest rate of natural increase. The increase in population also depends upon the death-rate, which to a considerable extent is influenced by the birth-rate. New South Wales, owing to its exceptionally favourable death-rate, stands third on the list, being exceeded by Tasmania and Western Australia.

#### AGES OF MOTHERS.

During the fifteen years 1893-1907 the ages of the women giving birth to children ranged from 11 to 58 years. As might be expected, the majority of the very young mothers were unmarried; thus of 7,314 mothers under 18

years of age, 3,894 were unmarried. The total number of married women who gave birth to children during the fifteen years was 529,779, the ages of whom were as follow. The proportion of mothers at each age per 10,000 of all ages is also shown:—

Ages of Married Mothers.	Number of Mothers.	Number of Mothers at each age per 10,000.	Ages of Married Mothers.	Number of Mothers.	Number of Mothers at each age per 10,000.
Years.			Years.		
13	1	...	25	30,194	570
14	17	...	26	30,636	578
15	114	2	27	30,087	568
16	714	13	28	30,289	572
17	2,574	49	29	28,058	530
18	5,993	113	30-34	120,731	2,279
19	10,361	205	35-39	84,177	1,589
20	14,565	275	40-44	33,079	624
21	20,686	390	45 years and over	3,480	66
22	25,046	473	Not stated	27	...
23	28,494	538			
24	29,959	566	Total	529,779	10,000

In two cases the age of the mother is stated as 55 years; in another case, as 56 years; and in another case, as 58. As these four cases were outside the usual experience, inquiries were made, with the result that the accuracy of the records was confirmed. It may be mentioned that in the first two cases the ages of the fathers were 45 and 55 years; in the third case, 58 years; and in the fourth case, 64 years. It is found that the age of the mothers of one-fourth of the children born does not exceed 25 years, and that before women pass their twenty-ninth year they give birth to one-half their offspring, only 10 per cent. of the births occur after age 38, and less than 7 per cent. after age 40 is reached.

Similar information regarding the ages of the fathers might also be shown, but is omitted because the age of the mother is by far the most important factor in deciding the number of children who will be born.

The mothers of illegitimate children are in some cases very young, as will be seen from the following table, which gives the ages of the mothers who gave birth to illegitimate children during the fifteen years 1893-1907. The proportion of mothers at each age per 10,000 of all ages is also shown:—

Ages of Unmarried Mothers.	Number of Mothers.	Number of Mothers per 10,000.	Ages of Unmarried Mothers.	Number of Mothers.	Number of Mothers per 10,000.
Years.			Years.		
11	1	...	27	1,245	320
12	2	...	28	1,130	290
13	21	5	29	949	244
14	115	30	30	932	239
15	407	105	31	549	141
16	1,120	288	32	644	165
17	2,228	572	33	568	145
18	3,188	819	34	556	143
19	3,862	992	35	530	136
20	3,675	944	36	463	119
21	3,591	922	37	373	96
22	3,082	792	38	405	104
23	2,640	678	39	329	84
24	2,144	551	40 and over.	747	192
25	1,816	466	Not stated..	111	29
26	1,512	388	Total.....	38,935	10,000

Two-thirds of the illegitimate children are born to mothers between the ages of 15 and 25, and more than one-half to women aged from 17 to 22.

## DEATHS.

The deaths during 1907\* numbered 16,410, equal to a rate of 10·55 per 1,000 of the population, which is 5·5 per cent. below the mean rate of the last ten years. This total includes 9,429 males and 6,981 females, so that amongst males the rate was 11·33, and amongst females 9·66 per 1,000, living of each sex. The average annual number of deaths of each of the sexes, with the rate per 1,000, in quinquennial periods, from 1870 is given below.

Period.	Average Annual Number of Deaths.			Death-rate per 1,000 of total Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1870-74	4,391	2,948	7,339	15·58	12·32	13·93
1875-79	6,199	4,360	10,559	17·99	15·10	16·67
1880-84	7,286	5,124	12,410	16·55	14·14	15·46
1885-89	8,461	6,043	14,504	15·43	13·36	14·49
1890-94	8,877	6,344	15,221	14·06	11·77	13·01
1895-99	9,002	6,514	15,516	13·11	10·77	12·01
1900-04	9,195	6,733	15,928	12·50	10·18	11·40
1905	8,709	6,269	14,978	11·10	9·03	10·13
1906	8,715	6,260	14,975	10·81	8·84	9·89
1907	9,429	6,981	16,410	11·33	9·66	10·55

The death-rate has fallen steadily from the earliest period to the latest amongst both sexes, but slightly more for males than females. The death-rate for males is, however, about one-sixth higher than for females, the reason being that males are exposed to more risks than females, and that male infants are the more delicate. It will be noticed that the death-rate has declined largely since the period 1890-94, and is thus coincident with the decline in the birth-rate. The falling birth-rate has influenced the death-rate in so far as it has affected the age constitution of the population by reducing the proportion living at the first five years where the mortality is high, and at the same time increased the proportion living at ages from 5 to 20 where the mortality is low. The decline in the death-rate is also coincident with the inauguration of the metropolitan sewerage scheme, as mentioned below.

For comparative purposes a table of the death-rates per 1,000 for each of the Australian States, New Zealand, and a number of European countries during the last six years is given below:—

State.	1902-1906.	1907.	Country.	1901-1905.	1906.
Victoria ... ..	12·54	11·66	Hungary ... ..	26·2	24·8
Tasmania ... ..	11·00	11·22	Italy ... ..	21·9	20·8
Western Australia ... ..	12·12	11·09	France ... ..	19·6	19·9
New Zealand ... ..	9·79	10·95	Prussia ... ..	19·6	17·9
New South Wales ... ..	10·81	10·55	Ireland ... ..	17·6	17·0
Queensland ... ..	11·95	10·35	Belgium ... ..	17·0	16·4
South Australia ... ..	10·61	9·72	Scotland ... ..	16·9	16·0
			England and Wales ... ..	16·0	15·4
			Netherlands ... ..	16·0	14·8
			Norway ... ..	14·5	13·7

New South Wales occupies the third place on the list in 1907, more favourable rates being shown by South Australia and Queensland.

The comparatively favourable conditions of Australasia will be manifest from an inspection of the foregoing rates.

It might have been expected that in any case the rates in the European countries would be higher than in New South Wales on account of the larger proportions of old persons in their populations, but in addition it must be remembered that some of the endemic scourges of the old world are unknown in Australia; also apart from climatic conditions, which are most favourable here, the social condition of the great body of the people is far superior to that of Europeans, and their occupations on the whole more healthful.

#### DEATHS—METROPOLIS AND COUNTRY.

It is not possible to show the exact difference between urban and rural mortality in New South Wales, but an approximate idea may be obtained from considering the experience of the metropolis and the country districts, although a few large towns are contained in the latter. Separating the State, therefore, into these two broad divisions, there were, during 1907, 6,238 deaths in the metropolis and 10,172 in the country, corresponding to the rates of 11.01 and 10.29 per 1,000 living respectively. The average annual number of deaths and the rate per 1,000 in each of these divisions since 1880, in five-year periods, is given in the subjoined table:—

Period.	Metropolis.		Country Districts.		New South Wales.	
	Average Number of Deaths.	Rate per 1,000.	Average Number of Deaths.	Rate per 1,000.	Average Number of Deaths.	Rate per 1,000.
1880-84	5,033	20.60	7,377	13.21	12,410	15.46
1885-89	6,181	19.47	8,323	12.18	14,504	14.49
1890-94	5,979	14.83	9,242	12.05	15,221	13.01
1895-99	5,634	12.30	9,882	11.86	15,516	12.01
1900-04	5,845	11.57	10,083	11.31	15,923	11.40
1905	5,770	10.87	9,208	9.71	14,978	10.13
1906	5,703	10.46	9,272	9.57	14,975	9.89
1907	6,238	11.01	10,172	10.29	16,410	10.55

In both metropolis and country the rate has steadily improved, but very much more in the metropolis, so that there the rate is now very little higher than in the country districts, whereas twenty years ago it was 50 per cent. higher. The fall began in the metropolis after 1889, the year when the improved sewerage system was installed, and about the same time that the Dairies Supervision Act came into operation. The decline in the rates for each division and for the State during the twenty years will be further emphasized when it is stated that the metropolitan rate fell from 19.5 to 11.0 per 1,000, or 43.6 per cent. The rate in country districts declined from 12.2 to 10.3, or 15.6 per cent., and for the whole State from 14.5 to 10.5, or 27.6 per cent.

#### MORTALITY OF INFANTS AND YOUNG CHILDREN.

A further measure of the mortality in the metropolis and country, offering a most sensitive test is obtained by a comparison of the death-rates of infants in each district.

*Children under 1 year.*—The number of children under 1 year of age who died in 1907 was 3,740, equal to a rate of 88.6 per 1,000 births. This rate is considerably higher than in 1906, and is also the highest experienced since 1903. It is nevertheless 10 per cent. below the mean rate for the last ten years. Male infants died at the rate of 93.9 per 1,000 births, and female infants at the rate of 83.1 per 1,000 births. To the total the metropolis contributed 1,380 deaths, or 96.3 per 1,000 births, and the country, 2,360, or 84.7 per 1,000 births.

The next table gives the average annual number of children under 1 year dying, in quinquennial periods since 1880, in the metropolis and country, and the proportion per 1,000 births.

Period.	Metropolis.		Country.		New South Wales.	
	Deaths under 1.	Rate per 1,000 Births.	Deaths under 1.	Rate per 1,000 Births.	Deaths under 1.	Rate per 1,000 Births.
1880-84	1,707	174.0	1,956	94.9	3,663	120.4
1885-89	2,168	164.6	2,256	95.2	4,424	120.0
1890-94	1,908	138.8	2,471	95.8	4,379	110.7
1895-99	1,646	134.4	2,572	103.7	4,218	113.9
1900-04	1,416	111.2	2,399	96.9	3,815	101.7
1905	1,230	89.3	1,952	75.9	3,182	80.6
1906	1,176	84.1	1,876	69.6	3,052	74.5
1907	1,380	96.3	2,360	84.7	3,740	88.6

The infantile mortality rate has improved more in the metropolis; in fact, up to 1900, in the country districts it was increasing. In the year 1904 there was a large decrease in both divisions compared with the rate for previous five years, and this improvement continued in 1905 and 1906; but in 1907 the rate took an upward movement, greater in the country than in the metropolis. The rate in the country districts has always been more favourable than that in the metropolis, although the difference now is not nearly so great as twenty, or even ten, years ago.

Of the total number of deaths of infants under 1 year of age, nearly one-fourth die within a week of birth; by the end of the first month the proportion reaches one-third, and after three months three-fifths. Judging by the experience of the last five years, it may be said that 1 in every 45 children born dies within a week of birth. The following statement shows for 1907, in comparison with the average of the five preceding years, the deaths per 1,000 births during each of the first four weeks after birth, and then for each succeeding month. The experience in the metropolis is distinguished from that in the country districts, and the sexes are taken together. Also for the year 1907, illegitimate children are distinguished from legitimate for the State as a whole.

Age.	Metropolis.		Country.		New South Wales.		
	1902-06.	1907.	1902-06.	1907.	1902-06.	1907.	
						Legitimate.	Illegitimate. Total.
Under 1 week ...	22.5	25.5	21.8	21.9	22.1	22.1	38.4 23.1
1 week ...	5.0	4.9	4.6	4.3	4.7	4.3	8.1 4.5
2 weeks ...	3.9	3.7	3.2	3.7	3.4	3.6	4.7 3.7
3 " ...	2.7	2.9	2.4	3.2	2.5	2.9	4.7 3.1
Total under 1 month	34.1	37.0	32.0	33.1	32.7	32.9	53.9 34.1
1 month ...	9.9	9.7	7.9	10.0	8.6	8.9	24.3 9.9
2 months ...	8.6	8.2	7.0	7.8	7.5	7.1	19.5 7.9
3 " ...	8.5	7.3	6.8	5.5	7.4	5.2	18.9 6.2
4 " ...	7.7	6.4	5.7	4.5	6.4	4.6	11.8 5.1
5 " ...	6.2	4.8	5.0	4.5	5.4	4.0	11.8 4.6
6 " ...	5.6	4.9	4.7	4.0	5.0	3.9	9.4 4.2
7 " ...	4.7	3.8	4.0	3.8	4.2	3.6	6.7 3.8
8 " ...	4.2	4.3	4.0	3.7	4.1	3.7	7.4 3.9
9 " ...	4.0	3.8	3.5	2.7	3.7	2.9	5.1 3.1
10 " ...	3.0	3.4	3.1	2.8	3.1	2.8	5.4 3.0
11 " ...	3.1	2.7	2.6	2.3	2.8	2.3	4.0 2.3
Total under 1 year ...	99.6	96.3	86.3	84.7	90.9	81.9	178.2 88.6

In the first week of life the mortality is more than five times as great as in the second, third, or fourth weeks. From the first month to the second the mortality falls rapidly, and from the second to the twelfth gradually. Comparing the mortality in the two divisions of the State—metropolitan and country—it is seen that at every stage of life children die more quickly in the metropolis. In 1907 the metropolitan rate was 96·3 and the country 84·7 per 1,000 births, the latter being 12 per cent. lower than the former. At the earlier ages the difference was least, the metropolitan rate being about one-tenth higher during the first four weeks. After the first month the difference fluctuated, but was greater in the metropolis at every age except the first and seventh months.

*Children under 5 years.*—Taking account of the first five years of life, it is found that there has also been a great improvement in the rates for those ages, and, at the same time, there is apparent the reason for the excessive death-rate in the metropolis as compared with the country districts. At every period in the table the metropolitan rate is the higher—in some cases over 50 per cent., and never below 18 per cent. in excess.

The following table shows the mortality in each division, in quinquennial periods, since 1890, of children under 5 years of age:—

Period.	Metropolis.		Country.		New South Wales.	
	Number.	Rate per 1,000 living.	Number.	Rate per 1,000 living.	Number.	Rate per 1,000 living.
1890-94	13,370	48·43	17,728	31·43	31,098	37·03
1895-99	11,027	40·94	17,436	30·63	28,463	33·94
1900-04	9,233	36·02	16,049	29·41	25,282	31·52
1905	1,555	28·55	2,588	23·30	4,143	25·02
1906	1,499	26·70	2,549	22·45	4,048	23·86
1907	1,857	32·18	3,168	27·19	5,025	28·84

The improvement in the metropolis has been greater than in the country; in the former the rate has decreased by 45 per cent. since 1890, and in the latter by 29 per cent. In the country the rate did not vary a great deal until 1904, when there was a large decline, which has continued. During the last sixteen years there has been a saving of the lives of 22 in every 1,000 children under 5 years of age in the metropolis and 9 in every 1,000 in the country.

#### INDEX OF MORTALITY.

In order to compare the death-rates of New South Wales with those of the other Australian States on a uniform basis, the death-rate of each State (index of mortality) has been calculated on the assumption that its population contained the same proportion at each of five age groups (under 1, 1 to 19, 20 to 39, 40 to 59, 60 and over) as was contained in the population of Australia as a whole at the census of 1901. Similarly in obtaining the index of mortality of each capital city, the mean population in 1901 of all the capital cities was taken as a standard.

The indexes of mortality during 1907 were found to be as follows, and for purposes of comparison the crude rates are attached:—

State.	Index of Mortality.	Crude Death-rate.	City.	Index of Mortality.	Crude Death-rate.
New South Wales	10·83	10·55	Sydney	11·24	11·00
Victoria	10·69	11·66	Melbourne	11·89	12·82
Queensland	11·17	10·35	Brisbane	12·73	12·13
South Australia	9·79	9·72	Adelaide	11·31	11·61
Western Australia	12·36	11·09	Perth	16·72	17·13
Tasmania	11·15	11·22	Hobart	13·48	15·19

Leaving out Perth and Hobart there is not a great difference between the rates of the Australian cities. Sydney has the most favourable index of mortality of all the capitals, and New South Wales is third amongst the States. The high rate for Western Australia is due largely to the high mortality amongst young people, and in Perth the rate is high in all age-groups. South Australia has the lowest crude rate, and Victoria the highest; but the adjusted rate shows Victoria in a much better position.

#### AGES AT DEATH.

The age and sex distribution of a population are most important factors in determining the death-rate; for instance, the rates at ages 5 to 50 are lower than for the whole population, so that a country with a high proportion at those ages, as in New South Wales, might expect to have a low death-rate. Again, a country with a high proportion of females will most likely have a favourable death-rate.

It has already been pointed out that results based on estimates of the numbers living in various age groups at periods remote from a census must be used with caution. And, therefore, no rates of that description are given in this report. It has been considered advisable to wait until after the next census in 1911, when the rates may be discussed with more definiteness.

#### CAUSES OF DEATH.

One of the most important sections of vital statistics is that relating to causes of death, and in the following discussion the principal diseases in New South Wales are treated in detail.

Until 1906, the system of classifying the causes of death was that adopted by the Registrar-General, England. In 1906, however, at a conference of Australian Statisticians, it was agreed to adopt the Bertillon classification, and causes of death in New South Wales are now tabulated according to that classification. The Bertillon system differs in many cases from the old, and in some rather materially, so that a comparison of the results in 1906 and 1907 with previous years is, to some extent, impaired.

In the following table will be found the principal causes of death arranged in order of fatality, together with the average number of deaths from similar causes during the previous five years, due allowance having been made for the increase in population. :—

Causes of Death.	Number, 1907.	Average Number, 1902-06.	Causes of Death.	Number, 1907.	Average Number, 1902-06.
Organic Diseases of Heart	1,278	1,174	Convulsions (under 5) ...	234	248
Endocarditis ...	105		Typhoid Fever ...	189	323
Diarrhoea and Enteritis	1,110	1,286	Suicide ...	162	180
(under 2) ...			Meningitis ...	157	183
Diarrhoea and Enteritis	270	364	Diphtheria and Croup ...	147	146
(over 2) ...			Diabetes ...	141	91
Tuberculosis—Lungs ...	961	1,193	Appendicitis ...	138	97
Cancer ...	1,085	1,015	Intestinal Obstruction ...	114	147
Pneumonia ...	1,048	1,070	Cirrhosis of the Liver ...	98	105
Old Age ...	949	1,045	Embolism and Thrombosis	92	55
Accidents ...	841	907	Measles ...	90	41
Premature Birth ...	694	660	Gastritis ...	86	112
Bronchitis ...	636	607	Congenital Malformations	81	122
Whooping-cough ...	594	131	Dysentery ...	80	120
Bright's Disease ...	587	556	Acute Rheumatism ...	71	75
Hæmorrhage, &c., of the	585	425	Alcoholism ...	61	90
Brain ...			Others ...	2,582	3,181
Congenital Debility ...	551	554			
Influenza ...	330	194	All Causes ...	16,410	16,789
Puerperal Condition ...	263	292			

Of the six most numerous causes, two showed increases—diseases of the heart, which the changes in classification may have increased, and cancer, which unfortunately does not respond to treatment. Bright's disease is also proving more prevalent each year, both as regards numbers and proportion to the population. Of other important causes bronchitis, hæmorrhage of the brain, whooping cough, and influenza showed increases.

As regards diseases ordinarily fatal to infants, there were decreases in diarrhoea and enteritis, congenital debility, convulsions, and malformations, and an increase in premature birth.

In the succeeding tables the changes in the important diseases are dealt with separately.

#### TYPHOID FEVER.

The number of deaths from typhoid fever during 1907 was 189, equivalent to 1.22 per 10,000 living, which is 41.5 per cent. less than the rate for the previous five years. As this is essentially a preventable disease, and readily yields to sanitary precautions, the rate is still high, notwithstanding the great improvement in the last seventeen years. The number of deaths and rates since 1884 have been as stated below:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88 ...	1,356	5.12	1,115	5.13	2,471	5.13
1889-93 ...	959	3.11	714	2.74	1,673	2.94
1894-98 ...	1,107	3.27	731	2.46	1,838	2.89
1899-1903 ...	1,054	2.91	733	2.25	1,787	2.60
1904 ...	139	1.82	110	1.63	249	1.72
1905 ...	150	1.91	89	1.28	239	1.62
1906 ...	153	1.90	118	1.67	271	1.79
1907 ...	112	1.35	77	1.06	189	1.22

The decrease between 1888 and 1893 was very marked, and is to be traced to the influence of the Dairies Supervision Act, which began to operate in 1889. From 1889 to 1903 the rate was very even, and did not decline to any extent. During the last four years, however, there has been a very considerable improvement.

The next statement gives the rate in the metropolis and in the country districts during the last fourteen years, and, contrary to what might have been expected, the rate in the metropolis has been only about two-thirds of that in the remainder of the State. It would appear that the drainage of some of the country towns is very defective, and the water supply less pure than in the metropolis.

Period.	Metropolis.		Country Districts.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1894-98 ...	507	2.26	1,331	3.24
1899-1903 ...	426	1.73	1,361	3.09
1904 ...	66	1.26	183	1.93
1905 ...	62	1.17	177	1.87
1906 ...	63	1.16	208	2.15
1907 ...	61	1.08	128	1.30

Most deaths occur in the summer and autumn. In 1907 there were 73 deaths in the summer months, December, January, February, and 59 in the autumn months, March, April, May.

## MEASLES.

Measles was the cause during 1907 of 90 deaths, equal to a rate of .58 per 10,000 living. The rate for males was .46, and for females .72, the female rate being the higher, which is the usual experience. The following statement shows the deaths from measles and the rate per 10,000 living, for each sex, arranged in quinquennial periods since 1884:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	166	.63	165	.76	331	.69
1889-93	393	1.28	369	1.41	762	1.34
1894-98	338	1.00	324	1.09	662	1.04
1899-1903	160	.44	219	.67	379	.55
1904	12	.16	9	.13	21	.15
1905	14	.18	15	.22	29	.20
1906	5	.06	12	.17	17	.11
1907	38	.46	52	.72	90	.58

Measles is a disease chiefly affecting children, and is periodically epidemic. The rates would be more accurately stated if the deaths were compared with the children living of like ages. However, taking the table as it stands, it will be seen that the disease during 1907 was much more fatal than in the three years preceding, and the rate was higher than the average of any year since 1898. The high rates during the second and third periods were due to severe outbreaks in 1893 and 1898.

## SCARLET FEVER.

In 1907 the number of deaths from this disease was 26, equivalent to a rate of .17 per 10,000 of the population, which is lower than in 1906, and 28 per cent. lower than the rate during the previous five years. The number of deaths in the metropolis was 13, and in the remainder of the State 13, the equivalent rates being .23 and .13 respectively per 10,000 living in each, which is a slight departure from the usual experience, which discloses a rate in the metropolis about three times as large as in the country districts. Since 1884 the deaths from scarlet fever and the rates for each sex have been as follows:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	287	1.08	342	1.57	629	1.30
1889-93	185	.60	236	.90	421	.74
1894-98	162	.48	218	.73	380	.60
1899-1903	84	.23	114	.35	198	.29
1904	22	.29	28	.41	50	.35
1905	9	.11	12	.17	21	.14
1906	23	.29	19	.27	42	.28
1907	14	.17	12	.17	26	.17

Over the whole period the deaths from scarlet fever show a steady and most satisfactory decrease in both sexes. Generally the rate for females is higher than for males. Like measles, it is an epidemic disease chiefly affecting children.

WHOOPIING-COUGH.

Whooping-cough is another of the diseases which chiefly affect children, and is more fatal to girls than boys. During 1907 whooping-cough was epidemic, and the deaths from it numbered 594, of which 313 were of girls, and 281 of boys. The rate was 3·82 per 10,000 living, which is the highest since 1878, and 353 per cent. above the average of the previous five years. The deaths and rates for each sex since 1884 have been as stated below :—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	327	1·24	472	2·17	799	1·66
1889-93	495	1·61	666	2·55	1,161	2·04
1894-98	343	1·01	502	1·69	845	1·33
1899-1903	573	1·58	726	2·23	1,299	1·89
1904	59	·77	88	1·29	147	1·02
1905	3	·04	2	·03	5	·03
1906	4	·05	6	·08	10	·07
1907	281	3·38	313	4·32	594	3·82

Taking the whole period covered by the table, this disease does not show any marked tendency to decline, the rates being maintained by epidemics, the last being, with the exception of 1878, the most severe yet experienced.

DIPHTHERIA AND CROUP.

Diphtheria, with which is included membranous croup, was responsible for 133 deaths in 1907, while croup, so defined, was responsible for 14. The rate for 1907 was ·95 per 10,000 living, which is very slightly above the rate for the previous five years. In the metropolis the number of deaths was 49, and in the remainder of the State 98, corresponding to rates of ·86 and ·99 per 10,000 living in each. The following table shows the number of deaths and the rates in five-year periods since 1884:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	1,069	4·04	980	4·51	2,049	4·25
1889-93	1,433	4·65	1,399	5·36	2,832	4·98
1894-98	712	2·10	710	2·39	1,422	2·24
1899-1903	310	·86	299	·92	609	·89
1904	111	1·45	76	1·11	187	1·29
1905	56	·72	59	·85	115	·78
1906	55	·69	61	·86	116	·77
1907	68	·82	79	1·09	147	·95

Until 1893 the rate did not show very much diminution, but it has since declined considerably, and is now less than one-fourth of what it was twenty years ago.

The average number of cases notified to the Board of Health of scarlet fever, diphtheria, and typhoid fever per 10,000 of the population living in the metropolitan district, during the years 1898 to 1907, as well as the death-rates and the fatalities per 100 cases, were as follows :—

Diseases.	Notified Cases.		Deaths.		Fatality per cent. (= Deaths per 100 cases).
	Number.	Rate per 10,000 of Population.	Number.	Rate per 10,000 of Population.	
Scarlet-fever ... ..	13,833	27·0	200	0·4	1·4
Diphtheria ... ..	5,447	10·7	452	0·9	8·3
Typhoid Fever ... ..	7,082	13·8	706	1·4	10·0

It is interesting to compare this result with the experience of London, where the fatality from scarlet-fever is 3·0 per cent. of notified cases, from diphtheria 12·8 per cent., and from enteric 16·5 per cent. All these diseases are more virulent in their effects in London, in the first case being about twice as fatal as in Sydney, and in the other two about one and a half times.

#### PHTHISIS.

Phthisis, or pulmonary tuberculosis, with 961 victims, caused 5·9 per cent. of the total deaths. This is equivalent to 6·18 per 10,000 living, the rate amongst males being 6·68 and amongst females 5·61 per 10,000. In both cases the rate, especially for males, showed an improvement, and was lower than ever before.

The table below shows the deaths from this disease and the rates for each sex since 1884 :—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	3,132	11·83	2,022	9·30	5,154	10·69
1889-93	3,269	10·61	1,925	7·38	5,194	9·13
1894-98	3,191	9·43	1,983	6·68	5,174	8·15
1899-1903	3,322	9·18	2,304	7·09	5,626	8·19
1904	653	8·55	503	7·37	1,156	7·99
1905	638	8·13	399	5·75	1,037	7·01
1906	609	7·56	398	5·62	1,007	6·65
1907	555	6·68	403	5·61	961	6·18

It will be observed that during the whole period of the table the rate declined amongst males, but after declining amongst females down to 1898 it then showed an upward tendency. In 1905, however, there was a marked improvement which has continued. The decrease in the number of deaths from phthisis and other forms of tuberculosis has taken place since the passing of the Dairies Supervision Act of 1886, the Diseased Animals and Meat Act of 1892, and the Public Health Act of 1896, and may be attributed to their operation. The Board of Health is empowered by these Acts to supervise dairies and the production of milk, cream, butter, and cheese, and to prevent the sale of tuberculous meat.

If the deaths be distinguished in the two divisions of the metropolis and the country districts, as in the following table, it will be seen that the rate in the former is 39·4 per cent. higher than in the latter : —

Period.	Metropolis.		Country Districts.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1894-98	2,302	10·26	2,872	6·99
1899-1903	2,490	10·04	3,136	7·14
1904	498	9·49	658	7·14
1905	437	8·23	600	6·33
1906	425	7·80	582	6·00
1907	418	7·37	543	5·50

The Australian climate is certainly favourable to those who suffer from pulmonary diseases, and a large number of persons suffering from phthisis visit Australia in search of relief. Many of these are in the last stages of the disease, and succumb after a short residence in the State. The experience of the last ten years shows that 3 per cent. of the fatal cases of phthisis were those of persons whose residence in Australia had not exceeded five years, and 1 per cent. of those who had been resident less than one year. The figures for the year 1907 show that out of the 961 persons who died from phthisis, 649 were born in Australasia, and of the remainder, 18 had been resident in the Commonwealth less than five years, 47 from five to twenty years, and 210 for more than twenty years; in 37 instances neither birth-place nor length of residence was stated.

Of the total persons dying from this disease 516, or 54 per cent., comprising 279 males and 237 females, were married, the families born to some of them being rather large. The experience of the last ten years shows that the average number of children to married males who died from phthisis was 4·07, and to married females 3·87. Over 77 per cent. of the issue born to these persons survived them.

Phthisis is the most deadly of all diseases, and the following comparison of the rates in various countries is interesting. The rates are stated per 1,000 of total population, and thus do not take specifically into account either age or sex, which are rather material factors. If anything, this omission makes the comparison more favourable to New South Wales and other Australian States, where the proportion of aged persons is smaller than in the countries of the old world. There is also possibly a variation in the methods of classification of the deaths in the various countries.

Country.	Death-rate per 1,000 of Total Population.		Country.	Death-rate per 1,000 of Total Population.	
	1896-1905.	1906.		1896-1905.	1906.
Hungary ... ..	3·80	3·84	Italy ... ..	1·20	1·22
Austria ... ..	3·43	.....	Victoria ... ..	1·15	·99
Servia ... ..	2·57	2·87	Ceylon ... ..	·91	1·05
Ireland ... ..	2·14	2·04	South Australia ... ..	·84	·82
Norway ... ..	2·01	.....	Queensland ... ..	·84	·68
German Empire ... ..	1·97	.....	New South Wales ... ..	·80	·66
Scotland ... ..	1·55	.....	New Zealand ... ..	·74	·62
Netherlands ... ..	1·49	1·36	Western Australia ... ..	·70	·82
Belgium ... ..	1·30	.....	Tasmania ... ..	·67	·66
England and Wales ... ..	1·27	1·15			

New South Wales stands fourth from the bottom of the above list. The rate in all the European countries is higher than in New South Wales, and

the three with lower rates are all Australian States. The experience of the countries in the table, with the exception of Ireland, Servia, and the Austrian empire, is similar to that of New South Wales, namely, that the rate is decreasing. In those countries the rate is very high, and shows no tendency to decrease.

#### CANCER.

There were 1,085 deaths from cancer in 1907, equal to a rate of 6·98 per 10,000 living, which is the highest on record. The deaths during the year were 632 amongst the males and 453 amongst the females, the rates being 7·61 and 6·26 per 10,000 living of each sex respectively.

It would appear that cases of cancer are increasing in New South Wales much faster than might be expected from the actual increase in population. During the last twenty years the rates have been doubled. It has been stated that the more skilful diagnosis of late years, especially of internal cancer, may account for part of the increase; but how far this is so it is impossible to say, and there seems to be no doubt that the spread of cancer is real. The following table shows the deaths and rates per 10,000 living for each sex since 1884:—

Period.	Males.		Females.		Deaths.	Rate per 10,000.
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.		
1884-88	859	3·25	732	3·37	1,591	3·30
1889-93	1,262	4·10	1,038	3·98	2,300	4·04
1894-98	1,719	5·09	1,387	4·68	3,106	4·89
1899-1903	2,295	6·34	1,877	5·77	4,172	6·07
1904	457	5·98	497	7·28	954	6·60
1905	525	6·69	440	6·34	965	6·53
1906	520	6·45	507	7·16	1,027	6·78
1907	632	7·61	453	6·26	1,085	6·98

The rates have increased steadily during the last twenty years, although the female rate fluctuates to some extent. Generally the male rate is the higher, which is contrary to the experience of the United Kingdom, where the female rate is higher.

The ages of the 1,085 persons who died ranged from 1 to 105 years, but cancer is essentially a disease of old age; 96 per cent. were aged 35 and over.

Of the 1,085 persons dying in 1907, 877—477 males and 400 females—were married, and of these 757 left families. From the experience of the last ten years it is found that the average family of married males who died of cancer was 5·96 children, and of married females 5·69 children, of whom about 76 per cent. survived their parents.

Included under the heading cancer are the deaths due to other malignant forms: Carcinoma to the number of 439; epithelioma, 65; sarcoma, 65; malignant tumour, 12; rodent ulcer, 5; scirrhus, 11; and others described as malignant disease, 186; leaving 302 which were described as cancer.

The principal parts of the body affected by cancer appear to be the stomach, liver, and intestines amongst males; and the uterus, stomach, intestines, liver, and breast amongst females. The following table, showing the principal parts affected in various ages in each 10,000 deaths, is based

on the experience of the last five years. In several instances more than one part was affected at the same time :—

Part affected.	AGE GROUP.						
	Under 35.	35-44.	45-54.	55-64.	65-79.	80 & over.	All Ages.
MALES.							
Head and Neck ...	27	38	114	137	259	34	609
Face and Jaw ...	26	50	126	187	369	87	845
Mouth and Throat ...	12	53	110	179	331	31	716
Tongue ...	8	38	88	160	179	11	484
Intestines ...	65	141	190	271	548	46	1,261
Liver ...	42	76	217	358	488	49	1,230
Kidney ...	27	19	69	98	278	27	518
Stomach ...	53	255	609	1,651	1,272	88	3,328
Others, and not stated ...	167	76	141	236	324	65	1,009
	427	746	1,664	2,677	4,048	438	10,000

FEMALES.							
Head and Neck ...	21	9	13	34	38	9	124
Face and Jaw ...	13	17	21	47	91	64	253
Mouth and Throat ...	9	9	21	22	29	4	94
Breast ...	38	223	347	368	347	69	1,392
Intestines ...	51	163	317	381	454	64	1,430
Liver ...	60	64	197	390	505	64	1,230
Kidney ...	26	13	21	30	30	9	129
Stomach ...	43	120	351	535	689	52	1,790
Uterus ...	129	377	775	535	463	55	2,334
Ovary ...	30	34	30	56	26	...	176
Others, and not stated...	111	149	245	240	206	47	998
	531	1,178	2,338	2,638	2,878	437	10,000

It is evident that cancer has an overwhelming tendency to invade the mammary and generative organs of females, the proportion of cases occurring in those parts being no less than 48 per cent. at all ages. The head, face, and neck, which are largely attacked among males, escape comparatively lightly among females.

Cancer is probably the most feared of all diseases, and in all countries for which there are records the death-rate is on the increase. In the following table the rates based on the whole population are given for certain countries. As previously explained, the comparison is somewhat rough, but is apparently favourable to the Australian States.

Country.	Death-rate per 1,000 of Total Population.		Country.	Death-rate per 1,000 of Total Population.	
	1896-1905.	1906.		1896-1905.	1906.
Switzerland ...	1.29	.....	Ireland ...	.63	.79
Netherlands ...	.95	1.01	South Australia ...	.61	.74
Norway ...	.90	.....	New South Wales ...	.59	.68
England and Wales ...	.83	.92	Tasmania ...	.56	.52
Scotland ...	.81	.....	Italy ...	.53	.62
German Empire ...	.74	.....	Queensland ...	.50	.55
Victoria ...	.72	.75	Western Australia ...	.38	.59
Austria ...	.70	.....	Hungary ...	.35	.40
New Zealand ...	.63	.70	Servia ...	.09	.11

In this comparison there are six with rates lower than New South Wales of which three are outside Australia. With the exception of Tasmania the rate in the above countries shows a tendency to increase.

## HÆMORRHAGE OF THE BRAIN.

To cerebral hæmorrhage and apoplexy there were due 585 deaths, of which 331 were males and 254 females. The rate is 3·76 per 10,000 living, 3·98 for males and 3·51 for females. In both sexes the rate is much above the average. The following table shows the rates for these diseases for each sex in quinquennial periods since 1884:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	778	2·97	467	2·15	1,245	2·58
1889-93	796	2·58	618	2·37	1,414	2·48
1894-98	943	2·79	710	2·39	1,653	2·60
1899-1903	1,050	2·90	788	2·42	1,838	2·68
1904	190	2·49	159	2·33	349	2·41
1905	268	3·42	210	3·03	478	3·23
1906	242	3·00	193	2·72	435	2·87
1907	331	3·98	254	3·51	585	3·76

Generally the male rate is a little higher than the female. There has been little difference in the rate for many years—it has fluctuated, first with a tendency to decrease down to 1895, and since then with a tendency to rise. Possibly the variations in the rate are due to some extent to differences in classification.

## INSANITY.

Insanity is classed as a disease of the nervous system, but of the total number of deaths of insane persons in 1907 only 157 deaths appear in the tables as due to insanity (including general paralysis of the insane), the remaining deaths being attributed to their immediate cause.

The death-rate of persons dying from insanity, including general paralysis of the insane, per 10,000 living, was 1·42 in the case of males, and ·54 in the case of females.

Practically all the insane persons in New South Wales are under treatment in the various Hospitals for the Insane. At the end of 1907 there were 5,576 persons under official control and receiving treatment. This is equal to 3·54 insane persons per 1,000 of population. The average number during the preceding five years was 3·47.

The percentage of deaths of insane persons in New South Wales is comparatively light. The following table has been computed on the basis of the average number of patients resident in Hospitals for the Insane:—

Period.	Males.		Females.		Persons.	
	Deaths in Hospitals for Insane.	Proportion of average number resident.	Deaths in Hospitals for Insane.	Proportion of average number resident.	Deaths in Hospitals for Insane.	Proportion of average number resident.
		per cent.		per cent.		per cent.
1894-98	782	6·86	366	5·18	1,148	6·21
1899-1903	1,021	7·77	465	5·54	1,486	6·91
1904	243	8·35	127	6·69	370	7·70
1905	222	7·40	120	6·11	342	6·89
1906	271	8·66	117	5·70	388	7·49
1907	269	8·32	113	5·32	382	7·13

Insanity is rarely fatal before the age of puberty, and the death-rate is greater amongst males than females.

There were 223 married persons amongst the insane, viz., 136 males and 87 females, and of these, 92 males and 64 females had issue. Taking the experience of the last ten years as a guide, the average number in a family of the married insane is 4.25. Of the insane who died during 1907, 106 persons, or about one-fourth of the whole, were aged 65 years and upwards.

#### DISEASES OF THE HEART.

Diseases of the heart, which include pericarditis, endocarditis, organic diseases, and angina pectoris, were the cause of 1,427 deaths, equivalent to a rate of 9.18 per 10,000 living. Of the total, 820 were males and 607 females, the rate being 9.87 and 8.38 per 10,000 living respectively. The deaths and death-rates for each sex since 1884 are shown below:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	2,149	8.12	1,390	6.39	3,539	7.34
1889-93	2,250	7.30	1,357	5.20	3,607	6.34
1894-98	2,434	7.19	1,478	4.98	3,912	6.16
1899-1903	2,917	8.06	1,952	5.94	4,849	7.06
1904	661	8.65	469	6.87	1,130	7.81
1905	644	8.21	485	6.49	1,129	7.64
1906	696	8.63	507	7.16	1,203	7.94
1907	820	9.87	607	8.38	1,427	9.18

This table shows that heart disease, on the whole, is on the increase, although it may be that part of the increase is due to a better acquaintance with the action of the heart, and that many deaths which were formerly attributed to old age are now referred to some form of heart disease.

The death-rate for males is higher than for females, probably due to the greater risks and shocks to which males are exposed. Among both sexes there was a large increase in the rate after 1898.

The ages of the persons who died ranged up to 100 years; and, as might be expected, the great majority of deaths occurred after middle age had been passed, 1,051 of the deaths being of persons over 45 years of age.

#### PNEUMONIA.

The total deaths from pneumonia were 1,048, equal to a rate of 6.74 per 10,000 living. Included in the total are 370 deaths which were ascribed to broncho-pneumonia. Among males the rate was 7.62, and among females 5.73 per 10,000 living of each sex respectively. The rate is the highest since 1902, but is 3 per cent. below the average of the previous five years. Pneumonia is more fatal to males than to females, as the following table, giving the rates by sexes, since 1884, shows:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	2,032	7.68	1,301	5.98	3,333	6.91
1889-93	2,158	7.00	1,373	5.26	3,531	6.21
1894-98	2,514	7.43	1,528	5.15	4,042	6.37
1899-1903	3,191	8.81	2,000	6.15	5,191	7.55
1904	578	7.57	393	5.76	971	6.71
1905	550	7.01	352	5.07	902	6.10
1906	557	6.91	327	4.62	884	5.84
1907	633	7.62	415	5.73	1,048	6.74

There has been little improvement in the rate for some years. There was a drop after 1888, but it then steadily increased, with a few fluctuations, to the highest point on record in 1902. The rates, however, for the last four years have been much below the figure for that year. Most deaths occur in the cold weather. In 1907 there were 448 deaths, or 43 per cent., in the three months July to September. Pneumonia is most destructive amongst young children and old persons.

#### DIARRHOEA AND ENTERITIS

In 1907 there were ascribed to these two causes 1,380 deaths, or 8·88 per 10,000 living, which is 15 per cent. lower than the average of the preceding five years. For males the rate was 9·02 and for females 8·72 per 10,000 living of each sex. The following table gives the deaths and rates of males and females since 1884:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88 ... ..	3,412	12·89	3,048	14·02	6,460	13·40
1889-93 ... ..	3,451	11·20	2,851	10·92	6,302	11·07
1894-98 ... ..	4,042	11·94	3,638	12·26	7,680	12·09
1899-1903 ... ..	4,422	12·22	3,901	12·00	8,323	12·11
1904 ... ..	626	8·19	590	8·65	1,216	8·41
1905 ... ..	663	8·45	528	7·60	1,191	8·05
1906 ... ..	837	10·38	621	8·77	1,458	9·63
1907 ... ..	749	9·02	631	8·72	1,380	8·88

There was a large drop in the rate after 1888, probably due to the influence of the Dairies Supervision Act. During the next fifteen years there was a gradual increase, but in 1904 there was a very great improvement, which has been maintained during the last three years.

According to the Bertillon classification, deaths from these diseases are divided into two groups, one including children under 2 years of age, and the other all persons 2 years of age and over. In the first group there were 1,110, or 80 per cent. of the total, and in the second 270. Compared with the average rates of the preceding five years there was a decline in the mortality of children under 2, the rate being 14·68 as against 17·50 per 1,000 children living at those ages. Of the total deaths from these causes, 595, or 43 per cent., occurred in the three summer months, January, November, and December, which were unusually cool; and 369, or 27 per cent., in the autumn, February, March, April. As a rule, over 50 per cent. of the deaths occur in the summer quarter.

#### DISEASES OF DIGESTIVE SYSTEM.

The deaths referred to these diseases numbered 2,117, equivalent to 13·62 per 10,000 living, the rates for males and females being 14·17 and 12·98, as compared with 16·10 and 15·51 respectively, the rates during the preceding five years. By far the most deaths in this system were ascribed to diarrhoea and enteritis, which have already been discussed. Other principal causes were those which follow, namely, gastritis, with 86 deaths, or 0·55 per 10,000 living, and gastric ulcer with 27, both of which were more fatal to females than males; appendicitis, with 138 deaths, or 0·89 per 10,000, which was more fatal to males, the most dangerous period being between the ages of

10 and 30; cirrhosis and other diseases of the liver, with 190 deaths, or 1.22 per 10,000 living—the majority of which was due to cirrhosis, which is much more prevalent among males than females, and is of interest in connection with the subject of intemperance; and peritonitis, without further description, which caused 59 deaths, equivalent to 0.38 per 10,000 living.

# BRIGHT'S DISEASE.

Of the 785 deaths due to diseases of the urinary system, 587 were caused by Bright's disease, and 52 by acute nephritis. Taking these two diseases together, the rate was 4.11 per 10,000 living, for males 4.68 and for females 3.45. In 1907 the rate was slightly above that in 1906, but was below the quinquennial average. The changes in the rates of these two diseases, acute and chronic nephritis, will be seen below:—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	626	2.37	386	1.78	1,012	2.10
1889-93	907	2.94	570	2.18	1,477	2.60
1894-98	1,291	3.81	821	2.77	2,112	3.33
1899-1903	1,659	4.58	996	3.06	2,655	3.86
1904	422	5.52	236	3.46	658	4.55
1905	413	5.26	234	3.37	647	4.38
1906	389	4.83	227	3.20	616	4.07
1907	389	4.68	250	3.45	639	4.11

During the whole period covered by the table the rate both for males and females has been practically doubled. The male rate is about half as high again as for females. Not many persons under 35 die from nephritis, the proportions per cent. for 1907 being: under 35, 16.3, and over 35, 83.7.

# DEATHS IN CHILD-BIRTH.

The number of deaths of women in 1907 from the diseases of child-bed was 263, corresponding to a rate of 6.2 per 1,000 births. Of these, 47 were due to puerperal septicæmia, 79 to accidents of pregnancy, and 49 to other puerperal accidents. Taking one year with another, the deaths resulting from various diseases and casualties incident to child-birth average about 7 per 1,000 births, or 1 death to every 142 births. During the fifteen years ended 1907, the deaths from various assigned causes were as follows:—

Cause of Death.	1895-1896.	1897-1900.	1901-1904.	1905-1907.	1893-1907.	
					Total Deaths.	Proportion due to each cause.
Accidents of Pregnancy	132	197	176	196	701	per cent. 17.46
Puerperal Hemorrhage	142	159	135	87	523	13.03
Puerperal Septicæmia	369	362	378	208	1,317	32.80
Albuminuria and Eclampsia	100	126	113	92	431	10.74
Phlegmasia Alba Dolens	7	7	1	6	21	.52
Other Casualties of Child-birth	265	272	255	230	1,022	25.45
	1,015	1,123	1,058	819	4,015	100.00

Owing to the changes in classification of causes of death, the figures for the last three years are not quite on the same basis as those for previous years, but the differences are only slight.

During the fifteen years, 1893-1907, of the 4,015 women who died from diseases of child-birth, 3,602 were married, and 413 single, and as there were during this period 529,769 legitimate and 38,935 illegitimate births—reckoning cases of twins and triplets as single births—it follows that amongst married women the fatal cases average 6·8 per 1,000 births, or 1 in 147, and amongst single women 10·6 per 1,000, or 1 in 94.

The following table shows the deaths in child-birth of married women during the fifteen years 1893-1907, arranged according to the previous issue of the deceased mothers, exclusive of children still-born, no information with respect to these being shown in the death registers :—

Previous Issue.	Number of Confinements.	Deaths in Child-birth.	Previous Issue.	Number of Confinements.	Deaths in Child-birth.
0	117,802	938	13	1,103	12
1	94,273	434	14	543	8
2	75,964	405	15	244	2
3	60,477	353	16	101	1
4	47,714	335	17	32	2
5	37,867	253	18	17	...
6	29,644	221	19	8	...
7	22,734	198	20	2	...
8	16,390	177	21	1	...
9	11,234	104	22	3	...
10	7,252	71	Not stated	1	2
11	4,156	51			
12	2,207	35	Total .....	529,769	3,602

The statement below shows the death-rate of each class up to the thirteenth, after which the numbers are too small to deduce averages :—

Previous Issue.	Deaths in Child-birth per 1,000 Confinements.	Number of Confinements per Death in Child-birth.	Previous Issue.	Deaths in Child-birth per 1,000 Confinements.	Number of Confinements per Death in Child-birth.
0	8·0	126	7	8·7	115
1	4·6	217	8	10·8	93
2	5·3	188	9	9·3	108
3	5·8	171	10	9·8	102
4	7·0	142	11	12·3	81
5	6·7	150	12	15·9	63
6	7·5	134	All Confinements	6·8	147

According to this statement the risk of death at the first confinement is higher than at any subsequent one up to the eighth. It is least at the second, but not much higher at the third. A most important consideration, therefore, so far as the risk of death in child-birth is concerned, is the number, if any, of the woman's previous issue.

#### VIOLENCE.

During the year 1,101 persons met with violent deaths. This corresponds to 6·71 per cent. of the total deaths, and is equal to a rate of 7·08 per 10,000 living, which is considerably below the mean rate for the previous five years. The mortality rate from violence amongst males is nearly three times as great as for females, since of the 1,101 deaths of this kind, 844, equal to 10·16 per 10,000 living, were of males, and 257, equal to 3·55 per 10,000, were of females.

*Accident or Negligence.*

The number of fatal accidents during the year was 841, viz., 636 of males and 205 of females, equal to rates of 7·66 and 2·83 per 10,000 living of each sex. Accidental deaths have always been very numerous, especially in the country. Of the total number registered during 1907, 231 occurred in the metropolis and 610 in the country districts. As a rule about three-fourths of the accidents occur in the country, which contains about two-thirds of the total population.

The number of deaths and the rates since 1884 are shown in the table below :—

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	3,550	13·41	944	4·34	4,494	9·32
1889-93	3,666	11·90	966	3·70	4,632	8·14
1894-98	3,498	10·33	1,095	3·69	4,593	7·23
1899-1903	3,432	9·47	1,103	3·39	4,535	6·59
1904	545	7·13	202	2·96	747	5·16
1905	586	7·47	237	3·41	823	5·57
1906	672	8·34	177	2·50	849	5·61
1907	636	7·66	205	2·83	841	5·41

Thus, although the accident rate is still high, it has been steadily decreasing. Among males the fall has been more rapid than amongst females. In 1907 there was a decrease among males and an increase among females as compared with 1906, but there was a decrease for both sexes as compared with the averages of the previous five years. For the years prior to 1894 the rates are really slightly lower than are shown in the table, because certain causes formerly classed as accidents are now recorded elsewhere.

Experience shows that out of every 1,000 accidents 172 are due to burns or scalds, 155 to drowning, 123 to vehicles and horses, 80 to weather agencies, 67 to falls, 65 to railways and tramways, and 60 to mines and quarries. Among males the greater number are due to drowning, and among females to burns or scalds.

*Suicide.*

The number of deaths due to this cause during 1907 was 162, equal to a rate of 1·04 per 10,000 living, which is 10 per cent. below the average of the previous five years. The number of males was 136, equal to a rate of 1·64 per 10,000 living, and of females 26, equal to 0·36 per 10,000, so that the rate for males is about three times as great as that of the females. The rates, both male and female, decreased during 1907.

The tendency to suicide, as evidenced below, shows little variation.

Period.	Males.		Females.		Persons.	
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
1884-88	428	1·62	96	·44	524	1·09
1889-93	519	1·68	110	·42	629	1·11
1894-98	679	2·01	169	·57	848	1·34
1899-1903	651	1·80	142	·44	793	1·16
1904	156	2·04	29	·42	185	1·28
1905	132	1·68	38	·55	170	1·15
1906	135	1·67	40	·56	175	1·16
1907	136	1·64	26	·36	162	1·04

The means usually adopted by men for self-destruction are shooting, poisoning, drowning, stabbing, or hanging. Out of every 100 cases, during the last five years, 31 are by shooting, 27 by poisoning, 16 by hanging, 13 by stabbing, and 9 by drowning. Amongst women, weapons are avoided, and poison has been the means most often used; the poisons selected being those which cause the maximum of pain, such as strychnine, arsenic, and phosphorus.

Of the suicides during 1907, 63 (46 per cent.) of the males, and 15 (58 per cent.) of the females were married. The records of the last ten years show that the average number of children born to married males who took their own lives was 4.62, and to married females 3.83.

Experience shows that conduct is largely influenced by the seasons. As regards suicides, this is most plainly seen amongst males, who are more inclined to attempt self-destruction in the last quarter of the year. January, February, and December, the three hottest months of the year, have the largest record of suicides. For the five years ended 1907 the proportion of male suicides per 1,000 during the first quarter of the year was 259; second, 222; third, 242; and fourth, 277.

Female suicides classified by quarters for the same period show the highest proportion during the first quarter of the year, the figures being as follow:—First quarter, 310 per 1,000; second, 220; third, 220; and fourth, 250.

#### SEASONAL PREVALENCE OF DISEASES.

The statement below shows the principal diseases, the deaths from which vary according to the seasons. The figures are based on the experience of the five years 1903–7, and represent the proportion of deaths in each month per 1,000 deaths during the year from each cause. The actual returns were adjusted on account of the unequal number of days in the various months to render the figures comparable.

Month.	Typhoid Fever.	Influenza.	Diphtheria and Croup.	Whooping Cough.	Phthisis.	Pneumonia.	Bronchitis.	Diarrhoea, Enteritis, and Dysentery
January ...	136	40	41	64	77	49	46	166
February ..	142	16	77	72	69	45	45	130
March ...	158	16	88	65	77	47	41	108
April ...	130	31	128	107	79	57	59	109
May ...	122	34	143	100	85	78	83	76
June ...	65	85	126	86	88	104	128	38
July ...	40	104	99	106	95	122	136	29
August ...	25	195	99	102	95	136	143	24
September..	22	201	71	90	92	126	122	24
October ...	23	140	40	72	91	92	77	45
November..	39	79	51	67	82	81	69	110
December..	98	59	37	69	70	63	51	141
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

The chief feature of the above table is the contrast between typhoid fever and diarrhoea and enteritis on the one hand, and influenza, pneumonia, and bronchitis on the other. In the first group the influence of the warm weather is the controlling factor, and in the second the cold weather. The warmest three months in the year are December, January, and February; and the coldest June, July, and August. Phthisis does not vary a great deal throughout the year, but the rates show that in the cold months the deaths are most frequent.

## CAUSES OF INFANTILE MORTALITY.

The mortality of infants in New South Wales, which was exceptionally low during the three years 1904-06, made an upward movement in 1907, so that the rate in that year was higher than in any of the three preceding. Prior to 1904 there had been practically little change in the rate for thirty years. From 1860 to 1873 the rate was lower than in the years immediately preceding 1904. At the very early ages children are most susceptible to the attacks of disease, and the rates for preventable diseases are highest. Any bettering of conditions and consequent saving of infant life is a gain to the whole community. In New South Wales, out of every 10,000 children born, over 1,600 die before reaching their fifth year.

As the death-rate of infants is usually looked upon as a reliable sanitary test, and as it is of interest to know the diseases most fatal to children, the following statement has been prepared. It shows the principal causes of death of children—under 1 per 1,000 births and under 5 per 1,000 living—in 1907 and in the five years 1902-6, distinguishing deaths in the metropolis from those in the country districts.

Cause of Death.	Deaths under 1, per 1,000 births.						Deaths under 5, per 1,000 living.					
	Metropolis.		Country.		New South Wales.		Metropolis.		Country.		New South Wales.	
	1902-06.	1907.	1902-06.	1907.	1902-06.	1907.	1902-06.	1907.	1902-06.	1907.	1902-06.	1907.
Measles .. ..	0.2	0.7	0.2	0.5	0.2	0.6	0.1	0.7	0.2	0.3	0.2	0.4
Scarlet Fever ..	0.2	0.1	0.0	..	0.1	0.0	0.3	0.1	0.1	0.1	0.1	0.1
Whooping-cough ..	1.3	8.0	2.3	8.9	1.9	8.6	0.6	3.6	0.8	3.1	0.7	3.3
Diphtheria and Croup ..	0.3	0.3	0.2	0.3	0.2	0.3	0.6	0.6	0.5	0.5	0.6	0.5
Tuberculosis—Meninges ..	1.0	0.8	0.6	0.2	0.8	0.4	0.6	0.4	0.3	0.1	0.4	0.2
„ Peritoneum ..	0.9	0.7	1.1	0.9	1.0	0.8	0.3	0.2	0.4	0.3	0.4	0.3
„ Other Organs ..	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1
Syphilis .. ..	2.4	0.7	0.3	0.2	1.0	0.4	0.6	0.2	0.1	0.1	0.3	0.1
Meningitis .. ..	1.6	1.4	0.8	0.3	1.1	1.0	0.8	0.5	0.4	0.4	0.5	0.5
Convulsions .. ..	3.1	2.7	5.9	5.4	5.0	4.5	1.0	0.8	1.6	1.6	1.4	1.3
Bronchitis .. ..	4.1	3.4	4.4	4.0	4.3	3.8	1.2	1.1	1.2	1.2	1.2	1.2
Broncho-pneumonia ..	5.6	4.3	3.8	4.7	4.0	2.5	1.6	1.8	1.5	2.0	1.5	1.5
Pneumonia .. ..	1.7	4.3	2.1	4.7	2.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Diarrhoea and Enteritis ..	32.9	27.7	22.1	17.9	25.9	21.2	10.2	8.5	6.8	5.8	7.9	6.7
Congenital Malformations ..	3.4	3.1	1.9	1.8	2.4	2.2	0.9	0.8	0.5	0.5	0.6	0.6
Infantile Debility .. ..	15.0	13.7	13.7	12.2	14.1	12.7	4.0	3.5	3.3	3.0	3.5	3.2
Premature Birth .. ..	17.2	18.8	15.3	15.2	16.0	16.4	4.3	4.6	3.5	3.7	3.8	4.0
All others .. ..	10.2	8.1	12.9	10.3	12.0	9.5	4.1	3.4	5.3	4.1	4.9	3.9
Total .. ..	99.6	96.3	86.3	84.7	90.9	88.6	32.3	31.6	26.9	27.4	28.7	28.3

There was a slight improvement on the whole in 1907, as compared with the preceding five years, notwithstanding they include three years of low mortality, and the improvement would have been more marked but for an epidemic of whooping-cough. Among children under 1 the reduction amounted to 2.5 per cent., and among children under 5 the rates were practically equal.

It will be seen that the high mortality of infants is due to the deaths of children who from the beginning are greatly weakened either from immaturity or debility at birth. Of children under 1, the deaths from these causes in 1907 were equal to 31.3 per 1,000 births, or 35 per cent. of the total deaths of children at that age. A previous table shows that the mortality during the first month of life is about one-third of the total mortality during the whole of the first year, and of this mortality during the first week it is found that 80 per cent. is due to deaths from congenital debility or defects. After these, in 1907, came diarrhoea and enteritis, which were responsible for deaths to the extent of 21.2 per 1,000 births. The deaths from infectious diseases amounted to 9.5 per 1,000 births, of which whooping-cough alone caused 8.6.

Respiratory diseases are rather fatal to children, bronchitis, in 1907, accounting for 3·8, broncho-pneumonia for 4·0, and pneumonia for 2·0 per 1,000 births. The last two causes both showed an increase in 1907. Convulsions had a death-rate of 4·5, tuberculous diseases of 1·4, and meningitis (not tuberculous) of 1·0 per 1,000 births.

It has already been pointed out that life in the metropolis is more unfavourable to children than in the country. Of the excess mortality in the metropolis, about three-fourths are due to diarrhoea and enteritis, one-third to congenital debility, one-fifth to syphilis, and one-tenth to pneumonia. Whooping-cough, tuberculous peritonitis, convulsions, and bronchitis show higher rates in the country.

Turning to the second part of the table, dealing with children under 5, it will be found that the most fatal causes, as to children under 1, are congenital debility, diarrhoea and enteritis, pneumonia, bronchitis, and convulsions, in that order. In all cases, except whooping-cough and convulsions, the metropolitan rate is the higher.

A further statement is given below in which the causes of death of illegitimate children are compared with those of legitimate children. The figures represent the deaths of children under 1 per 1,000 births in the State as a whole in 1907.

Causes of Death.	Deaths under 1 per 1,000 Births.		
	Legitimate.	Illegitimate.	Total.
Measles ... ..	·5	1·3	·6
Scarlet Fever ... ..	...	·3	·02
Whooping-cough ... ..	8·6	8·4	8·6
Diphtheria and Croup ... ..	·3	...	·3
Tuberculosis—Meninges ... ..	·4	1·0	·4
„ Peritoneum ... ..	·8	1·3	·8
„ Other Organs ... ..	·2	...	·2
Syphilis ... ..	·2	3·0	·4
Meningitis ... ..	1·0	1·7	1·0
Convulsions... ..	4·3	6·1	4·5
Bronchitis ... ..	3·6	6·1	3·8
Broncho-pneumonia ... ..	3·9	5·1	4·0
Pneumonia ... ..	1·8	4·0	2·0
Diarrhoea and Enteritis ... ..	18·4	59·3	21·2
Congenital Malformations ... ..	2·2	2·7	2·2
Infantile Debility ... ..	11·4	30·0	12·7
Premature Birth ... ..	15·7	25·9	16·4
All others ... ..	8·6	22·0	9·5
Total... ..	81·9	178·2	88·6

The reasons for the greater mortality of illegitimate children are seen from this table. Excluding diseases which may be ascribed to inherent weakness, there is strong evidence of neglect or want of care as regards these unfortunate children. Infantile debility showed 58·6 per 1,000 births as against the legitimate rate, 29·3. Diarrhoea and enteritis were 59·3 as compared with 18·4; respiratory diseases 15·2 as compared with 9·3; and syphilis 3·0 as compared with ·2. Among the epidemic diseases there was not a great difference. Whooping-cough actually showed a lower rate, 8·4, for illegitimates than for legitimates, 8·6.

## EDUCATION.

### THE EDUCATIONAL REVIVAL.

IN 1902 a Commission was appointed by the Government of New South Wales to inquire into and report upon the methods of instruction pursued in the chief continental countries, and in America and Great Britain. The first portion of the Report of this Commission was presented in 1903, and the remainder in 1904 and 1905, and several drastic changes in the system in vogue were therein advocated. The need for reform was immediately recognised; but while from financial and other reasons the recommendations of the Commissioners cannot for some time be carried out in their entirety, the system is being gradually moulded in conformity with them.

The abolition or modification of the pupil-teacher system, mentioned elsewhere, is amongst the foremost of the changes. Moreover it has come to be recognised that it is the initial stages of education which call for the best and most scientific teaching, and with this end in view efforts are being put forward in the direction of ensuring that all infant-school teachers shall possess a thorough acquaintance, theoretical and practical, with kindergarten principles.

Throughout the whole school system strenuous attention is now being devoted to improvement in methods, to substitution of the concrete for the abstract, and to the interlinking and correlation of the various subjects of study. The mere imparting of facts is looked upon as entirely subsidiary to the development of the self-activity of the pupil. Greater stress is laid upon the cultivation of the powers of observation. The teaching of manual subjects has been entirely revolutionised and brought more into accordance with modern ideas.

The importance of a widely-diffused knowledge of agriculture to a young country like New South Wales has been recognised by the Education Authorities, and a Director of School Agriculture has been appointed, who will visit schools and districts to give practical instruction in elementary agriculture to both teachers and students. In addition, rural camps are established from time to time, at which boys from metropolitan schools are accommodated for a short period at a nominal expense, and such excursions are planned as will enable them to gain an insight into the practical working of the farms, dairies, &c., in the vicinity, and to acquire a knowledge of the importance of the agricultural, pastoral, and other primary producing industries.

Coincident with the change or improvement in regard to methods of teaching, the duties of inspectors have been entirely remodelled. Under the old system, the inspector was little more than an examining officer. So much time was taken up in asking questions, and recording percentages of correct replies, that the inspector had but scant opportunity of inquiring into methods, and estimating the true educative value of the teaching given. In accordance with the new arrangements, however, the inspector's principal duty will be to co-operate with and advise the teachers in order to give effect to the true aim of the syllabus—the production of good citizens.

## THE RISE OF THE STATE SCHOOL SYSTEM.

In the early years of the history of the State, education was almost entirely denominational, the Government granting subsidies to the various religious bodies in proportion to the amounts expended by them on this service. This arrangement was, however, not universally satisfactory, and various modifications were effected between the years 1839 and 1880. At the latter date there had been for some time in the minds of a large section of the community a growing repugnance of the principle of granting State aid to religious schools, and the feeling culminated in the passing of the Public Instruction Act of that year. This measure abolished subsidies to the denominational schools, and entirely remodelled the State educational system. The Education Act of 1866 was repealed, the Council of Education dissolved, and the control of educational matters placed under the direction of a Minister of State.

Provision is made for public schools to afford primary instruction to all children without sectarian or class distinction; for superior public schools, in which additional lessons in the higher branches may be given; for evening public schools, with the object of instructing persons who have not received the advantages of primary education while of school age; and for high schools for boys and girls, in which the course of instruction will complete the public school curriculum and prepare students for the University. In all schools administered under the Act the teaching is strictly non-sectarian; but the words "secular instruction" are held to include general religious teaching, as distinguished from dogmatical or polemical theology. The history of England and of Australia also form part of the course of secular instruction. Four hours during each school day are devoted to secular instruction exclusively; but another hour each day may be set apart for religious instruction, to be given in a separate class-room by a clergyman or religious teacher of any persuasion to children of the same sect whose parents have no objection to such instruction.

The advantage of this provision permitting religious instruction to be given to scholars in State schools has not been used to any great extent by the various denominations. Nine salaried teachers are employed by the Church of England in the Diocese of Sydney to give special religious instruction in public schools, and one of the Bishop's chaplains holds the appointment of Diocesan Inspector of Schools; but he has no authority outside the classes for special religious instruction. During the year ended 30th June, 1908, there were nearly 28,000 children regularly instructed by paid teachers, voluntary teachers, catechists, and clergy, in the Diocese of Sydney. Exclusive of infants, it is estimated that about 80 per cent. of the Church of England children attending public schools in the Diocese were receiving special religious instruction.

The total number of visits paid by clergymen and religious teachers, and the number of children enrolled in classes for religious instruction, for the year 1907, were as shown below:—

Denomination.	Number of visits during the year.	Number of Children enrolled.
Church of England ... ..	25,661	109,306
Roman Catholic ... ..	1,100	31,436
Presbyterian ... ..	7,292	24,453
Methodist ... ..	7,654	28,954
Other denominations... ..	4,766	15,080

The school age ranges from 6 to 14 years, and it is compulsory for parents to send their children to school for at least seventy days in each half-year, unless cause for exemption can be shown; but although the compulsory system has been in force since the year 1880, it was not until 1906 that the payment of school fees was abolished. Prior to that date a weekly fee of 3d. per child was payable, with a maximum of 1s. for all the children of one family; but exceptions were made in the cases of parents who were unable to pay. The fees thus received were paid into the Consolidated Revenue Fund, and the amount collected exceeded £80,000 per annum.

Special arrangements are made for the conveyance of children to school. They are allowed to travel free by rail to the nearest public or private primary school, to the nearest superior public school, provided they are sufficiently advanced to be enrolled in the fifth class, and to the High Schools. In districts remote from the railway, coaches are subsidised by the Government to convey children to and from the nearest school.

Other sections of the Act provide for the establishment of provisional schools, and the appointment of itinerant teachers in remote and thinly-populated districts. The multiplication of small schools in the various districts has, however, recently fallen into disfavour, as it is recognised that one central school would offer the dual advantage of greater economy and increased efficiency. Where possible, it is intended to abolish clusters of small schools, and replace them by well-equipped central institutions, to which the children will be conveyed free of charge. During 1907 this system of conveyance was in operation in connection with thirty-eight schools. In thinly-populated districts so far removed from any State-aided school that attendance at such is out of the question, the State grants subsidies to small private schools. There were 281 of these subsidised institutions in operation for some portion of the year 1907. Provision is also made for the establishment of training schools for teachers.

The local supervision of the public schools is placed in the hands of School Boards appointed in the various districts of the State, under the provisions of the Public Instruction Act. These Boards are supposed to exercise a general oversight in regard to the public schools in their districts. They may suspend teachers in cases of gross misconduct; endeavour to induce parents to send their children regularly to school, and report the names of parents or guardians who refuse or fail to educate their children. They cannot, however, interfere with the internal discipline or management of the schools, which remain under the direct control of the Minister of Public Instruction, through the inspectors and other officers of his Department. The total number of Boards in operation at the close of 1907 was 326; but, comparatively, few take material interest in the welfare of the schools in their district. Parents are not compelled to send their children to the public schools; they have full choice in the matter, the State only insisting that a certain standard of education shall be attained, whether the instruction be imparted in public or in private schools. The weak point in this proviso lies in the fact that the State has no means of ascertaining the character of the instruction given in private schools, many of which, it is to be feared, are conducted by ill-educated and unskilled persons. Furthermore, nothing is known regarding the regularity of attendance at these institutions, as the records are not open for inspection by State officers.

#### EDUCATIONAL PROGRESS.

The intellectual advancement of the State has been extremely rapid. At the Census of 1881, out of the 751,468 persons enumerated, there were 195,029, or very nearly 26 per cent., unable to read; while of the

977,176 natives of the State at the Census of 1901, only 226,780, or 23·2 per cent., were returned as unable to read. Included in this number were 154,659 children of 4 years of age and under, so that there were only 72,121 persons, or 8 per cent. of the population 5 years of age and over, who were unable to read.

Another gauge of educational progress will be found in the entries of the marriage registers signed by marks. The earliest official record of marriages is that for 1857. Of 5,804 persons married during that year, 1,646, or 28·4 per cent., were unable to sign the marriage register; while in 1907 the number of such persons was only 208, or a little under 1 per cent. of the total number married. Half a century has passed away during the period embraced by the following table, and the improvement shown is most interesting:—

Year.	Persons married.	Number signing with marks.	Percentage signing with marks.	Year.	Persons married.	Number signing with marks.	Percentage signing with marks.
1857	5,804	1,646	28·4	1900	19,992	290	1·5
1860	5,890	1,559	26·5	1901	21,076	283	1·3
1870	7,696	1,403	18·2	1906	23,102	216	0·9
1880	11,144	743	6·7	1907	24,378	208	0·9
1890	15,752	426	2·7				

An imperfect comparison, only, can be made of the number of children receiving instruction during past years, as the number in actual attendance cannot be distinguished from the number enrolled. The following table gives the number of schools, public and private, excluding the University and affiliated colleges, business colleges, and shorthand schools, and the number of enrolled scholars for a period of seventy-one years; and although not absolutely correct, it may be regarded as fairly indicative of the educational progress of the State.

Year.	Population of the State.	Schools.	Children enrolled.	Percentage of population enrolled.
1836	77,096	85	3,391	4·4
1841	149,669	209	9,632	6·4
1851	197,168	423	21,120	10·7
1861	357,978	849	37,874	10·6
1871	517,758	1,450	77,889	15·0
1881	765,015	2,066	197,412	25·4
1891	1,142,030	3,175	252,947	22·1
1901	1,367,850	3,723	304,653	22·2
1906	1,514,390	3,755	327,983	21·7
1907	1,554,780	3,876	341,363	22·0

The number of children given above as enrolled in the various schools is, of course, far in excess of the actual school attendance, as the gross enrolment for the year is given, and not the mean for each quarter. The latter information cannot be obtained except for recent years; but the figures as they stand afford a basis of comparison.

There has been a gradual decline in the enrolment relatively to the population since 1881. This result is attributed to the large number of children attending private and denominational schools, the latter of which ceased to have connection with the State in 1882; to the weakness of the compulsory clauses of the Education Act, as referred to elsewhere, and also to the falling off in the birth-rate.

The following table shows the total enrolment of distinct children during the ten years which closed with 1907, as well as the quarterly enrolment, in the public and private schools of the State, omitting the University and affiliated colleges, Sydney Grammar School, business and shorthand schools. The mean quarterly enrolment may be taken as giving the nearest approximation to the number of children actually under tuition in State and private schools.

Year.	Schools.	Teachers.	Scholars.		
			Total enrolment.	Mean quarterly enrolment.	Percentage of children of school age in mean quarterly enrolment.
1898	3,558	8,028	285,740	262,089	81.1
1899	3,746	8,291	293,392	268,791	82.0
1900	3,657	8,415	298,709	273,040	80.2
1901	3,707	8,565	302,072	273,007	83.7
1902	3,714	8,740	302,607	271,787	83.8
1903	3,703	8,908	301,774	271,576	83.5
1904	3,722	8,977	298,442	269,300	83.4
1905	3,754	9,041	296,483	269,250	84.9
1906	3,737	9,120	296,200	266,448	84.4
1907	3,856	9,269	293,176	271,149	84.1

In the total enrolment for 1907, the 1,725 children in reformatories, industrial schools, and charitable institutions were not included. Taking these into account, 83.9 per cent. of all the children of school age were receiving instruction in schools. The ages of children enrolled at State and private schools during 1907 were as follows :—

Age Period.	State Schools.	Private Schools.	Total.
Under 6 years ..	8,762	4,859	13,621
6 and under 14 years	184,858	43,180	228,038
14 years and over ...	20,089	9,401	29,490
Total... ..	213,709	57,440	271,149

The weakness of the compulsory clauses of the Education Act is in great measure responsible for the fact that attendance at the State schools is not so high as it should be. The burden of proof of non-attendance at school rests with the Crown, and a common device resorted to in order to evade action by the Department, is for the parents to state that a child attends some private institution, the principal of which cannot be compelled to produce records. Again, the fines imposed for breaches of the Act are so inadequate that parents pay them, finding themselves amply reimbursed by the value of the labour of their children, who in busy times are kept away from school for lengthened periods. More stringent measures are needed to cope with the evil of truancy, which is one of the most fruitful causes of juvenile crime. It is a regrettable circumstance that at present the Act in many cases cannot reach children whose names are not on the roll of any school, while the parents of others whose attendance falls short of the prescribed 70 days in each half-year are liable to prosecution. It is hoped that these anomalies will shortly be remedied by legislation.

In the next table will be found a classified statement of the total public and private schools in operation during the last quarter of 1907, exclusive of the University and affiliated colleges, business colleges, and shorthand schools.

All schools not receiving monetary assistance from the State are considered as private colleges or schools.

Class.	No. of Schools.	Teachers.			Scholars—December Quarter.		
		Males.	Females.	Total.	Males.	Females.	Total.
State Schools ... ..	3,050	3,214	2,531	5,745	109,736	99,493	209,229
Sydney Grammar School ...	1	25	...	25	534	.....	534
Private Colleges and Schools ...	806	655	2,869	3,524	24,915	32,525	57,440
Institute for the Deaf and Dumb and the Blind ... ..	1	8	5	13	75	42	117
Ragged Schools ... ..	5	1	9	10	176	142	318
Free Kindergarten Schools ...	10	...	47	47	308	327	635
Reformatory ... ..	1	1	...	1	96	.....	96
Industrial Schools ... ..	2	3	2	5	303	97	400
	3,876	3,907	5,463	9,370	136,143	132,626	268,769

In June, 1908, there were, under the control of the State, thirty-three evening schools in Sydney, with an attendance of 2,058 pupils.

#### DEGREE OF EDUCATION.

At the Census periods of 1861, 1871, 1881, 1891, and 1901, the degree of education of every 10,000 children over 5 and under 10 years of age was as follows:—

	1861.	1871.	1881.	1891.	1901.
Read and write ...	2,355	3,470	4,413	5,377	5,575
Read only ...	3,289	2,752	1,982	1,368	896
Unable to read ...	4,356	3,778	3,605	3,255	3,529

Taking the children from 10 and under 15 years, the comparison is still more satisfactory:—

	1861.	1871.	1881.	1891.	1901.
Read and write ...	6,769	7,666	8,804	9,705	9,805
Read only ...	1,854	1,292	614	143	65
Unable to read ...	1,377	1,042	582	152	130

The steady decrease in the proportion of illiterate children from 1861 to 1871, and from 1871 to 1881, is plainly visible from the above tables, and the returns for 1891 and 1901 showed that this satisfactory decrease continued.

#### STATE SCHOOLS.

When the present Public Instruction Act came into operation on the 30th April, 1880, there were maintained or subsidised by the Government, 1,220 schools, attended by 101,534 scholars, thus distributed:—

	No. of Schools.	No. of Pupils.
Public ... ..	705	68,823
Provisional ... ..	313	8,312
Half-time ... ..	97	1,683
Denominational ... ..	105	22,716
Total ... ..	1,220	101,534

At the close of 1882 the connection of the denominational schools with the State ceased, and the following year was marked, as expected, by a considerable falling-off in the number of children who were receiving their

education at the expense of the State. The check operated only for a short period, as the year 1884 showed a recovery of more than the ground lost. This will be seen by the following table, which shows the enrolment and attendance of children at State-supported schools under the Public Instruction Act only:—

Year.	Gross enrolment of distinct children.	Quarterly enrolment.	Average attendance.
1882	159,490	134,872	90,944
1883	155,824	130,205	88,546
1884	167,134	139,159	95,215
1891	205,673	178,278	122,528
1901	241,790	212,725	154,404
1902	243,668	212,848	155,916
1903	243,516	213,318	154,382
1904	240,631	211,489	153,260
1905	238,629	211,396	153,953
1906	237,493	207,741	152,646
1907	235,736	213,709	152,607

From the time of the withdrawal of aid from denominational schools up to the end of 1907, the increase in the average quarterly enrolment at State schools was 58·5 per cent. In 1907 the proportion of the population enrolled at State schools, on the basis of the quarterly returns, was 13·7 per cent., being slightly in excess of that of the previous year; and the proportion in average attendance, 9·8 per cent. as compared with 10·1 per cent. in 1906. Notwithstanding the increase in population there has been little or no improvement in the quarterly enrolment during the last eight years, due, principally, to the decline in birth-rate having reduced the number of young children.

The table below affords a comparison between the number of schools in operation in 1881, the first full year in which the Department was under Ministerial control, and the number open in 1907:—

Classification.	No. of Schools and Departments in operation.	
	1881.	1907.
High Schools ... ..	.....	5
Superior Public Schools ... ..	58	325
Primary Public Schools ... ..	1,042	1,837
Provisional Schools ... ..	246	409
Half-time Schools ... ..	93	352
House-to-house Schools ... ..	.....	12
Evening Schools ... ..	57	36
Subsidised Schools ... ..	.....	281
Industrial and Reformatory Schools	2	3
Total ... ..	1,498	3,260

The 3,260 schools, enumerated above, provided accommodation for 220,372 pupils, and as the average attendance in 1907 was 152,607, it is apparent that the Department has amply supplied requirements for space in the way of school buildings. Great improvements have been effected in school architecture during recent years, and some of the New South Wales institutions will compare favourably with the best of those in other lands. While the lighting and ventilation in many of the earlier buildings is still rather defective, vigorous efforts are being made to remodel them in accordance with scientific principles.

According to an investigation made recently, all children attending the public schools of the State are taught to read; 90 per cent. are instructed in writing, arithmetic, music, and drill, and receive scriptural and moral as well as object lessons; 88 per cent. in drawing; 80 per cent. write to dictation; 40 per cent. are instructed in the rules of English grammar; and 39 per cent. are taught geography and history; while over 80 per cent. of the girls receive instruction in needlework. Under the new system of examination, figures for all the schools are no longer available. The inspectors are not now obliged to examine into every detail of school work, with a view to awarding "marks," their duties being rather in the direction of instituting the revised system of education.

The teachers in the public schools of the State at the end of 1907 numbered 5,745 (3,214 males and 2,531 females), or 182 more than in the previous year. The average number of pupils per teacher, on the basis of the mean quarterly enrolment, was 37, and the average attendance per teacher, 27, while the average quarterly enrolment of children per school was 66. The following table shows the classification of the teaching staff at the end of 1907:—

Grade.	Males.	Females.	Total.
Principal Teachers... ..	2,164	304	2,468
Mistresses of Departments ... ..	.....	218	218
Assistants ... ..	624	1,370	1,994
Students in Training Schools ... ..	152	147	299
Pupil-teachers ... ..	251	383	634
Work-mistresses ... ..	.....	97	97
High School Teachers ... ..	23	12	35
Total ... ..	3,214	2,531	5,745

The teachers are graded and obtain promotion from class to class after passing a series of examinations, which are so framed as to efficiently test both their progress in scholastic attainments, and their skill in imparting knowledge. For long and meritorious service, however, a teacher may receive promotion from one section to another in the same grade. There are seven classes of public schools. In these, the salaries paid to male married teachers range from £108 to £400; quarters valued at £20 to £72 being provided in addition. Unmarried male teachers in charge of schools receive from £72 to £400, and female teachers from £84 to £186. Teachers in half-time schools are paid at the same rates as teachers in public schools of corresponding classification. The salaries of mistresses in charge of girls' departments range from £200 to £280; and of those in charge of infants' departments, from £180 to £228.

Assistant male teachers, if classified, receive from £108 to £280, and assistant female teachers, holding a classification, from £96 to £192. Ex-students of training schools, acting as assistants, receive £96 to £168 in the case of males, and £84 to £120 in the case of females. Male ex-pupil-teachers, acting as assistants, receive £84 to £108, and females £84 to £96. The salaries of work-mistresses range from £96 to £126; of male pupil-teachers, from £40 to £65; and of female pupil-teachers, from £25 to £45. Teachers in house-to-house schools receive £5 per head of average attendance, with a maximum of £96. The salaries of junior assistants range from £60 to £108 in the case of males, and £42 to £92 in the case of females. Where necessary, a sum of £10 per annum is granted as forage allowance, in addition to the ordinary remuneration. Special allowances may be granted to teachers stationed in remote localities, where the cost of living is high.

## TEACHERS' TRAINING SCHOOLS.

Up to the year 1905 the teachers in New South Wales State schools, generally speaking, commenced their career between the ages of 14 and 16 years, when they were known as pupil-teachers. As such they were held responsible for the instruction of a certain number of children, and in return for their services received payment, partly in the form of a small salary and partly in teaching and advice from the principals of the schools wherein they were employed. After serving four years, the pupil-teachers then underwent a course of training in the training college, if successful in passing a qualifying examination, and on emerging from this institution were called assistant teachers, and later on became masters or mistresses of schools. Pupil-teachers who did not enter the training colleges were either placed in charge of small schools or appointed as assistant teachers, and, after some lapse of time, were allowed to compete in the ordinary examinations on the same footing as the trained teachers, and, in fact, many of them found it temporarily to their advantage, from a pecuniary point of view, not to enter the training colleges. In addition to those who had gone through the course outlined above, there was the considerable body of practically untrained teachers who had commenced their career in the small schools in outlying districts of the State, many of whom by perseverance and natural aptitude for teaching had attained positions of considerable importance under the Department.

Within the last few years, however, it has become recognised that a system wherein persons are appointed as teachers without previous training, or else allowed to teach for a period of four years prior to undergoing a course of training, is illogical, and the Department has now determined to place the course of training in its right position, *i.e.*, antecedent to employment on the regular teaching staff. Under the revised scheme, therefore, the pupil-teacher system will be abandoned; but the process, of course, will be gradual, for at the end of 1907 there were still 634 pupil-teachers employed in the State schools. It is intended that these, and all future accessions to the ranks of the teaching service, shall undergo a course of training in a properly-appointed college, and provision has been made for a liberal scheme of scholarships in that connection.

Until 1905 the Training College for males was a non-residential institution worked in connection with the Fort-street Model School, and for females accommodation and training were afforded at Hurlstone College. Both of these institutions have now been closed, and it is proposed to replace them by a well-equipped institution in connection with the University, where students of each sex can be received into residence. Pending the erection of this building, the work of training both male and female teachers is being conducted at the Blackfriars Public School, the only suitable institution within easy reach of the University and the Technical College.

One hundred and fifty-two male and one hundred and forty-seven female teachers were undergoing a course of training in 1907.

As already remarked, the pupil-teacher system will gradually become extinct. In order to provide a supply of teachers to take its place, a scheme has been evolved whereby young people of both sexes who wish to become teachers will be admitted after examination to a two years' course of study at schools classified as District Schools. On completion of this course, pupils will be eligible to sit at the necessary examination for admission to the Training College. The minimum age for admission to probationary student classes in the District Schools is 15 years. Liberal provision has been made by the Department by means of bursaries and scholarships at the District Schools, also at the Training College.

## EXPENDITURE ON STATE SCHOOLS.

The average annual cost per child in average attendance at the public schools has greatly varied, as will be seen by the following table, which gives the amounts for the last ten years :—

Year.	For school premises.	For the maintenance of schools.	For administration, and training schools.	Total Cost per child.	Amount of Fees received.	Net Cost per child.
	s. d.	£ s. d.	s. d.	£ s. d.	s. d.	£ s. d.
1898	14 10	4 1 8	6 6	5 3 0	10 4	4 12 8
1899	12 2	4 0 0	6 6	4 18 8	10 6	4 8 2
1900	14 10	3 19 11	6 8	5 1 5	10 9	4 10 8
1901	7 6	4 4 6	6 8	4 18 8	10 5	4 8 3
1902	9 10	4 7 4	7 4	5 4 6	10 11	4 13 7
1903	13 1	4 11 2	7 4	5 11 7	10 9	5 0 10
1904	9 5	4 14 2	7 1	5 10 8	10 8	5 0 0
1905	7 8	4 14 9	6 8	5 9 1	10 6	4 18 7
1906	11 11	4 17 5	7 3	5 16 7	8 6	5 8 1
1907	13 7	4 19 4	8 0	6 0 11	0 6	6 0 5

The expenses necessary for obtaining efficient results in a country of such a vast extent and so sparsely populated as New South Wales have been unavoidably great. School-houses had to be built, teachers required training, and the whole educational machinery had to be provided in many parts of the country where there was perhaps only a denominational school, or no educational establishment at all. To these initial expenses was due, in a great measure, the relatively high cost of public education in the first few years after the passing of the Act of 1880. In 1883, for instance, the total cost per child in average attendance was not less than £9 5s. 7d. In 1896 this had been reduced to £4 11s. 7d. The average for 1907 stood at £6 0s. 11d., but in this connection it must be remembered that owing to the declining birth-rate the attendance has fallen away to some extent during the last six years.

The following table shows the gross expenditure by the State on primary education during the ten years ended 1907, and the annual amount per head of population :—

Year.	Total Amount.	Per head of population.	Year.	Total Amount.	Per head of population.
	£	s. d.		£	s. d.
1898	729,922	11 1	1903	861,544	12 1
1899	737,080	11 1	1904	847,830	11 9
1900	780,216	11 6	1905	839,976	11 4
1901	761,637	11 1	1906	881,581	11 8
1902	814,883	11 8	1907	922,295	11 10

A division of this expenditure under the two heads of "School Premises" and "Maintenance and Administration" is shown below, and the deduction of the school fees received gives the net cost to the State during each of the ten years in question :—

Year.	Number of Schools.	Gross enrolment of distinct Pupils.	Expenditure on school premises.	Expenditure on maintenance of schools, including administration, &c.	Total Expenditure.	School Fees.	Net State Expenditure.
			£	£	£	£	£
1898	2,602	227,561	105,054	624,868	729,922	73,093	656,829
1899	2,693	233,233	90,926	646,154	737,080	78,358	658,722
1900	2,745	238,382	114,279	665,937	780,216	82,494	697,722
1901	2,818	241,790	57,063	703,974	761,637	80,240	681,397
1902	2,846	243,668	76,793	738,090	814,883	85,230	729,653
1903	2,862	243,516	100,955	760,589	861,544	82,906	778,638
1904	2,870	240,631	72,051	775,779	847,830	81,825	766,005
1905	2,901	238,629	58,820	781,156	839,976	81,367	758,609
1906	2,885	237,493	89,975	791,606	881,581	64,135	817,446
1907	3,050	235,736	103,348	818,947	922,295	*3,617	918,678

\* High schools only.

It is apparent that the amount directly contributed by parents towards their children's education has been but a small proportion of the total cost. From the 8th October, 1906, fees were abolished in the primary and superior public schools throughout the State, and the amount of £3,617, collected in 1907, represents the fees received from pupils in the five high schools.

Of the 3,050 schools shown above, nearly 60 per cent. were small schools averaging less than 30 in daily attendance. Owing to the migration of families for various reasons, it is occasionally found necessary to close some of these institutions, and in such cases the regulation permitting the granting of subsidies in isolated districts has been utilised. At the close of 1907 there were 220 subsidised schools in operation, with an enrolment of 1,809 children.

#### SCHOOL SAVINGS BANKS.

A system of school savings banks was initiated during 1887 in connection with the public schools of the State. At the close of 1907 there were 681 banks in operation, as compared with 678 at the close of 1906. The deposits for the year amounted to £24,663, and the sum withdrawn was £23,408. The total amount to the credit of the school banks on the 31st December, 1907, was £10,043, as compared with £8,789 at the end of 1906. Since 1887 the total sum of £303,031 has been deposited and £294,988 withdrawn. Of the latter sum an amount of £72,721 was placed to the credit of children's accounts in the Government Savings Bank. The object of these banks is to inculcate practically the principles of economy while the minds of the children are susceptible of deep impressions.

#### PRIVATE SCHOOLS.

The attendance at private schools greatly increased after the withdrawal of aid from the denominational schools which had been under the control of the Education Department. Many of these latter establishments

ceased to exist immediately on the withdrawal of State aid, and the children by whom they had been attended were transferred mainly to the ordinary public schools of the State. Some of the schools, however, were still maintained, chiefly those connected with the Roman Catholic Church, and thenceforth appear in the returns as private schools.

Below will be found a statement showing the number of private schools in the State during each of the ten years 1898 to 1907, with the teaching staff and number of scholars enrolled :—

Year.	Schools.	Teachers.	Scholars.	Year.	Schools.	Teachers.	Scholars.
1898	956	3,269	58,179	1903	841	3,368	58,258
1899	1,053	3,407	60,159	1904	852	3,396	57,811
1900	912	3,352	60,327	1905	853	3,482	57,854
1901	889	3,353	60,282	1906	852	3,557	58,707
1902	868	3,339	58,939	1907	806	3,524	57,440

Probably, many of these private institutions are capably managed, and the instruction given is of a high order, but on the other hand there are numerous schools in charge of persons whose knowledge and ability to teach are meagre. The remedy for this would be for the State to insist on a certain standard of education being observed, such as prevails in the public schools, making it obligatory on teachers to furnish proof of the requisite knowledge and ability to impart instruction.

The 806 private schools existent during 1907 are divided into the following classes :—

Classification.	Schools.	Teachers.	Scholars.
Undenominational ... ..	368	1,241	10,539
Roman Catholic ... ..	374	1,884	42,005
Church of England ... ..	54	299	3,434
Presbyterian ... ..	3	40	267
Methodist ... ..	2	38	358
Lutheran ... ..	1	1	26
Hebrew ... ..	1	6	548
Seventh Day Adventist ... ..	3	15	263
Total ... ..	806	3,524	57,440

A considerable number of the schools returned as undenominational are conducted under the auspices of local churches, though no particular form of religious opinion is inculcated therein. Of distinctly religious schools, those of the Roman Catholic Church constitute the great majority, numbering 85·4 per cent. of professedly denominational schools, and including 89·6 per cent. of the scholars educated therein. On the withdrawal of State assistance from denominational schools in 1882, there were in operation under the Department of Education, 75 Roman Catholic schools attended by 16,595 pupils; and there were also some unassisted schools connected with that church, of which statistics were not available.

In 1907 the number had grown to 374, with an enrolment of 42,005. The table given below shows the record during the last ten years :—

Year.	Schools.	Teachers.	Scholars on Roll.			Average Attendance.		
			Males.	Females.	Total.	Males.	Females.	Total.
1898	312	1,573	17,236	21,227	38,463	13,214	16,550	29,764
1899	318	1,613	17,785	21,864	39,649	13,758	17,265	31,023
1900	325	1,617	17,887	22,249	40,136	13,988	17,571	31,559
1901	341	1,721	18,731	22,755	41,486	14,817	18,160	32,977
1902	342	1,694	18,488	22,380	40,868	14,584	17,761	32,345
1903	350	1,778	18,469	22,520	40,989	14,779	17,906	32,685
1904	355	1,787	18,462	22,650	41,112	14,780	17,943	32,723
1905	361	1,835	18,477	22,791	41,268	14,703	18,205	32,908
1906	365	1,871	18,700	23,406	42,106	14,806	18,516	33,322
1907	374	1,884	18,696	23,309	42,005	14,945	18,864	33,809

The Church of England is the only other religious body maintaining a considerable number of schools. During 1907 the schools connected with this church numbered 54, and were attended by 3,434 pupils. At the end of 1882 there were in existence 42 Church of England schools, with an enrolment of 11,927 children. The following table gives particulars of these schools during the past ten years :—

Year.	Schools.	Teachers.	Scholars on Roll.			Average Attendance.		
			Males.	Females.	Total.	Males.	Females.	Total.
1898	57	280	2,082	2,248	4,330	1,611	1,630	3,241
1899	59	299	2,072	2,173	4,245	1,583	1,671	3,254
1900	55	295	1,967	2,191	4,158	1,496	1,706	3,202
1901	52	240	1,868	2,098	3,966	1,434	1,585	3,019
1902	57	293	2,007	2,256	4,263	1,617	1,781	3,398
1903	59	322	2,110	2,356	4,466	1,740	1,837	3,577
1904	56	285	1,988	2,128	4,116	1,654	1,714	3,368
1905	60	295	1,930	2,024	3,954	1,554	1,567	3,121
1906	60	292	1,928	1,994	3,922	1,557	1,585	3,142
1907	54	299	1,705	1,729	3,434	1,430	1,399	2,829

There has been, approximately, a constant number both of schools and scholars during the last ten years.

#### HIGHER EDUCATION.

The State has made provision for higher education by the establishment of High Schools in the metropolis and in the principal centres of population. The curriculum of these schools is of such a character as to enable students to complete their course of instruction, and, if they so wish, to prepare themselves for the University examinations. Admission to these schools is by examination only. There were at the close of the year 1907

two High Schools for boys, two for girls, and one for boys and girls. The gross enrolment for that year was 469 boys and 439 girls, making a total of 908 pupils. The average daily attendance was 669. The expenditure amounted in 1907 to £9,501, and the fees received to £3,617, so that the net cost to the State was £5,884, or £6 9s. 7d. per head of the total enrolment. During 1907, 92 pupils from the High Schools passed the junior, 24 the senior, and 71 the matriculation examinations at the University, 36 of the matriculants qualifying at the junior, and 16 at the senior examinations.

Superior Public Schools are also established, in which the subjects taught embrace, in addition to the ordinary course prescribed for Public Schools, such other subjects as will enable the student to compete at the senior and junior public examinations. There were 142 of these schools in existence at the end of 1907, with an enrolment of 92,926 pupils.

The results of the University public examinations for 1907 show that 11 senior and 209 junior passes were obtained by Public School pupils. Of these the whole of the senior passes and 99 junior certificates were gained by the Fort-street Model School. It is interesting to note that, out of the total passes of all candidates from New South Wales at the junior examination in 1907, over 56 per cent. were obtained by scholars attending the Public Schools.

In addition to the High Schools, District Schools have been established at twenty-four centres. These schools, while giving a sound secondary education to the pupils who attend them, will also serve as preparatory training-schools for young people who desire to enter the teaching profession.

A system of scholarships and bursaries for boys and girls at State schools has been in operation under the Public Instruction Act, but the scheme is to be considerably extended. District and High School scholarships to the number of 100 are to be awarded annually, and 72 bursaries instead of 48 as at present. Scholarships, distinguished as District and High School, Agricultural, Junior Technical, Intermediate Technical, and Senior Technical, are open to all classes of deserving pupils of schools within the State for competitive examination half-yearly, with the exception of scholarships for the Hawkesbury Agricultural College, which are awarded annually. Bursaries, distinguished as District and High School, Junior Technical, and Intermediate Technical, are also awarded half-yearly upon competitive examination to pupils of State schools, whose parents are unable to afford them a higher education.

The examinations for scholarships and bursaries, tenable at District and High Schools for three years, are open to all boys and girls under 15 years of age, and entitle the holders to free tuition and text-books. In the case of a bursar who lives at home, an annual allowance not exceeding £10 is made; but when a bursar is compelled to board away from home, an allowance not exceeding £30 is granted. A very extensive application of the scholarship and bursary scheme to Agricultural and Technical Education has also been authorised.

In addition to the foregoing, 12 bursaries (6 for boys and 6 for girls), tenable at the Sydney University for three years, are open to competition annually, and are awarded in order of merit at the matriculation examinations. During the year 1907, 112 candidates were successful at the examinations held under the scholarship and bursary scheme. Of these, 25 boys and 26 girls obtained scholarships for High Schools and Superior Schools; 23 boys and 24 girls, bursaries for High and Superior Schools; 2 boys, bursaries for Sydney Grammar School; and 6 boys and 6 girls, University bursaries.

In addition to the various classes of Public Schools already mentioned, there exist several institutions of an educational character which receive an annual subsidy from the Government. The most important of these is the Sydney Grammar School, which receives an annual endowment from the State of £1,000. In 1907 the other revenue, derived from school fees and other sources, amounted to £9,768, and the total expenditure for the year was £14,804, of which salaries and allowances absorbed £10,270.

In 1907, the mean quarterly enrolment was 553, and the average attendance 523.

#### THE UNIVERSITY.

An Act incorporating the University of Sydney was passed and received the Royal assent on the 1st October, 1850.

An endowment, from the public revenue, of £5,000 per annum was given for "defraying the stipends of teachers in literature, science, and art," and for administration purposes, there being no provision made for teaching any other branch. Power was, however, given to examine and to grant degrees in law and medicine as well as in arts. The University was to be strictly undenominational, and the Act expressly prohibited any religious test for admission to studentship or to any office or for participation in any of its advantages or privileges.

The first Senate commenced its labours at the close of the year 1850, with Mr. Edward Hamilton, M.A., as Provost, and Sir Charles Nicholson, M.D., as Vice-Provost. It shortly established three chairs in Classics, Mathematics and Chemistry and Experimental Physics, and sent to England for competent professors to fill them. On the 11th October, 1852, the University was opened with an imposing ceremony, in presence of the Governor and principal officers, and under the presidency of Sir Charles Nicholson, twenty-four matriculated students being admitted to membership.

In 1858 a Royal charter was granted, which declares that "the degrees of this University in arts, law, and medicine shall be recognised as academical distinctions of merit, and be entitled to rank, precedence, and consideration in the United Kingdom as fully as if the said degrees had been granted in any university of the United Kingdom."

Since the passing of the original Act various amendments have been made. In 1884 the Senate's powers as regards teaching and degrees were extended by enabling it to give instruction and to grant degrees or certificates in all branches of knowledge, with the exception of Theology or Divinity, subject to a proviso that no student should be compelled to attend lectures or to pass examinations in Ethics, Metaphysics, or Modern History; and it was directed, in accordance with a previous by-law of the Senate, that the benefits and advantages of the University should extend in all respects to women equally with men.

The Women's College, affiliated to the University, was opened in March, 1892. It was established for the purpose of affording residence and domestic supervision to female students of the University, with efficient tutorial assistance in their preparation for the lectures and examinations. The college is strictly undenominational—the Act of Incorporation providing that no religious catechism or formulary shall be taught which is distinctive of any particular denomination, and that no attempt shall be made to attach students to any particular denomination. When the college was opened in a house at Glebe Point, leased until the permanent buildings were completed, four students were entered. The present buildings

were opened in the early part of 1894, and at the close of that year there were 8 students, while in 1907 there were 21. There is, however, accommodation for 26 resident students. The Government granted £5,000 towards the erection of buildings, but, while it pays the salary of the Principal, affords no endowment to the college.

The public endowment of the University was £5,000 per annum until 1880, when £1,000 was added for assistant lectureships; but in 1877 a bequest of the value of £6,000, producing about £300 a year, was made by Mrs. Hovell, widow of the explorer of that name, for instruction in Geology and Physical Geography; and this sum, together with fees, enabled the Senate to establish a Chair of Chemistry, to which Geology and Physical Geography were attached, apart from that of Experimental Physics. In 1882 a further sum of £5,000 was voted to enable the Senate to establish Schools of Medicine and Engineering, and to give some further help to the original Department of Arts. Medical and Engineering Professors and Lecturers and a Professor of Natural History were appointed, and some small lectureships in Arts were created; but this sum was soon found inadequate for the intended purposes, and was increased to £7,900, inclusive of the £1,000 granted in 1880. Allowances were also made for apparatus, and a sum of £2,000 per annum granted for evening classes in Arts. In 1893 the Government endowment amounted to £13,000, and the special grants to £5,695. Since that year the State aid has been largely reduced, and in 1907 the endowment was £10,000, together with special grants amounting to £3,750. Principally out of the endowment for Evening Classes, a system of Extension Lectures to non-matriculants was commenced in 1886, first in the metropolis, and afterwards in the country districts; later on it was extended to the neighbouring colony of Queensland.

In 1855 the present site was granted by Royal authority for the erection of suitable buildings, and to provide land for the erection of four denominational Colleges. In 1873 provision was made for the establishment by the University of a Medical School in connection with the Royal Prince Alfred Hospital, and for joint control by the University Senate and the Hospital Board in respect to all appointments to the medical and surgical staff of the Hospital.

Many donations have been made to the University for helping and rewarding students. Among the first were gifts of £1,000 each from Mr. Thomas Barker, Sir Daniel Cooper, and Sir Edward Deas-Thomson, represented by lands which are now of twice that value. Many others followed, and about £60,000 has been presented up to the present date, exclusive of prizes which have been exhausted by award, and irrespective of increases in value. In addition, a sum of £30,000 was left by the late Mr. Thomas Fisher for a library, and £6,000 was given by the late Sir William Macleay for a Curatorship of the Natural History Museum, presented by him to the University, and for which the Government have erected a suitable building. There have also been bequests of property, other than money, to the estimated value of £51,000.

Above all, the late Mr. John Henry Challis left his residuary estate to the University, subject to certain annuities. In December, 1890, the trustees handed over to the University the major part of the Australian portion of the estate, consisting of £199,362 in investments, together with a cash balance. In addition to the above amount, the trustees of the estate retained the English estate for payment of annuities granted under the will, also a further amount as a guarantee fund, but the final payments of capital from the Australian and English trustees were made during

1907, bringing the capital sum up to £276,856, and the Challis Estate has now passed wholly into the possession of the University. Under this bequest, the Senate have created Chairs in Law, Modern Literature, History, Logic, and Mental Philosophy, Anatomy, Engineering, and Biology, and a Lectureship in Military Science, to which they have given the testator's name. The Hovell and Challis bequests constituted, until the end of 1894, the only resources of the University for actual education other than the public endowments. During 1896, Mr. P. N. Russell, of London (formerly of Sydney), devoted £50,000 to the purpose of endowing a School of Engineering, and this gift was supplemented by a further grant of £50,000 in 1904. The teaching staff of the University now consists of 15 professors and 74 lecturers and demonstrators.

In the Faculty of Arts there are professorships in Latin, Greek, Modern Literature, Modern History, Logic and Mental Philosophy, and Mathematics, with assistant lecturers in Latin, Mathematics, English, French, and German.

In the Faculty of Law there are a professor of Law and four lectureships in the following subjects, viz.:—Law of Status, Civil Obligations and Crimes, Law of Procedure, Pleading and Evidence, Law of Property, and Equity, Probate, and Bankruptcy and Company Law.

The Faculty of Medicine has professors in Physiology, Anatomy, and Pathology, with demonstrators in each of these subjects. There are also lectureships in Medicine, Surgery, Clinical Medicine, Clinical Surgery, Midwifery, Diseases of Women, Materia Medica and Therapeutics, Medical Jurisprudence and Public Health, Ophthalmic Medicine and Surgery, and Psychological Medicine. There are also 6 honorary lecturers in special subjects, 5 honorary demonstrators in Anatomy, as well as a medical tutor and surgical tutor.

The Faculty of Science has professorships in Chemistry, Physics, Geology and Physical Geography, and Biology, with lecturers in Palaeontology, Embryology, and Physiography, and demonstratorships in all the professorial subjects. The Faculty of Science also includes the Department of Engineering, in which there are a professor of Civil Engineering, separate lectureships in Mechanical Engineering, Electrical Engineering, Surveying, Mining, Metallurgy, and Architecture, with demonstratorships in the Engineering subjects, as well as a demonstrator in Metallurgy, who acts as assistant to the professor in Chemistry.

From the foundation of the University to the end of 1907, 2,897 degrees of various kinds have been conferred, the highest number bestowed in any one year being 188 in 1906. Of the total number, 2,897, male graduates obtained 2,521, and females 376. The degrees conferred include 343 M.A., 1,373 B.A., 25 LL.D., 146 LL.B., 51 M.D., 382 M.B., 271 Ch.M., 3 D.Sc., 74 B.Sc., 6 M.E., 170 B.E., 30 L.D.S., and 23 B.D.S. During 1907 the degrees conferred (including *ad eundem*) were M.A. 7, B.A. 70, LL.B. 7, M.D. 1, M.B. 30, Ch.M. 17, B.Sc. 11, M.E. 1, B.E. 11. Five male students received the degree of L.D.S., and 10 males the degree of B.D.S. in the Dentistry Course. The number of matriculated students increased from 34 in 1876 to 871 in 1907.

Examinations, termed the Senior and Junior, corresponding to the middle-class examinations of the English Universities, are held annually at Sydney, and at a number of local centres, including towns in Queensland. These examinations are open to all candidates, male or female, who may present themselves, and have proved highly popular, attracting no less than 1,408 candidates in 1907, of whom 185 were seniors and 1,223 juniors.

The following statement shows the number of students attending lectures at the University, and the results of the Public Examinations, at intervals since 1876:—

Year.	Students attending Lectures.	Matriculated Students.	Attending Extension Lectures.	Public Examinations.							
				Number of Seniors.				Number of Juniors.			
				Examined.		Passed.		Examined.		Passed.	
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1876	58	34	...	53		40		356		312	
1886	203	122	137	107		83		858		548	
1896	454	438	396	77	65	59	49	973	508	633	332
1901	657	574	720	78	44	61	34	637	423	440	257
1902	730	667	475	86	33	69	30	688	421	454	270
1903	777	724	1,015	99	43	87	37	742	411	524	267
1904	820	750	1,565	86	44	76	41	787	467	526	327
1905	948	756	1,640	102	59	84	49	843	422	600	279
1906	1,054	836	1,345	119	43	92	34	832	387	582	263
1907	1,178	871	819	129	56	104	45	813	410	531	273

Examinations for the admission of articled clerks were instituted in 1877, in compliance with a rule of the Supreme Court, and in 1907 there were 28 successful candidates.

Below is given a statement showing the amount derived by the University from each of the principal sources of revenue, at intervals since 1876, the total expenditure during each year being also shown:—

Year.	Receipts.					Expenditure.
	Government Aid.		Lecture fees.	Other sources.	Total.	
	Endowment.	Grants for apparatus or other special purposes.				
	£	£	£	£	£	£
1876	5,000	.....	403	100	5,503	5,877
1886	12,000	5,500	2,600	323	20,423	20,765
1896	9,000	2,400	8,171	11,923	31,494	31,557
1901	9,000	800	11,619	14,347	35,766	37,130
1902	9,000	3,317	11,950	15,387	39,654	42,690
1903	10,000	5,533	13,338	16,815	45,686	44,348
1904	10,000	3,500	14,171	16,965	44,636	43,430
1905	10,000	3,250	15,309	18,524	47,083	47,599
1906	10,000	3,500	16,640	18,807	48,947	48,409
1907	10,000	3,750	17,220	16,713	47,683	50,298

An extensive addition to the University's magnificent buildings has been made for the use of the School of Medicine, which provides the most complete accommodation for students desiring to follow the profession of medicine and surgery. The Prince Alfred Hospital affords them the necessary means of practical demonstration. During the year 1907 there were 353 undergraduates, of whom 21 were women, in the Medical School. This branch of the University was established in 1883, when there was an enrolment of 4 students. A laboratory for the Department of Physics has been erected, and is replete with every means of illustrating the teaching of physical science. In March, 1890, a Department of Chemistry

and its adjuncts were instituted. The accommodation provided includes lecture halls and four laboratories. One of the laboratories is used in connection with the School of Mines, which was opened early in 1895 for the purpose of imparting instruction in geology (including physical geography and palæontology), mineralogy, and practical mining work. In the various branches of the Department of Engineering, there was an enrolment of 94 students during the year.

A School of Dentistry was established in 1901. The course of instruction, which extends over a period of four years, aims at giving a thorough insight into the surgical and mechanical divisions of the profession. Intending students must pass the ordinary University matriculation examination or its equivalent before admission to the College. The undergraduates attending in 1907 numbered 41.

#### COMMERCIAL EXAMINATIONS.

In 1897 the Public Service Board's examinations for junior clerks for the Civil Service was instituted, and on an average about 250 candidates are examined annually.

The Institute of Bankers of New South Wales also conducts an annual examination for admission to the Bank service. During 1907 the candidates presenting themselves for examination numbered 260, of whom 162 were successful.

The Sydney Chamber of Commerce has instituted examinations at which candidates may gain certificates of competency in commercial education.

#### DENOMINATIONAL HIGH SCHOOLS AND COLLEGES.

The principal religious bodies provide high schools and colleges where students may be educated according to the precepts of their various beliefs, and be prepared to compete for University honours or for the various professions which they may adopt. Evidence of the progress of superior denominational education in the State may be seen in the magnificent college buildings which surround the city, among which may be cited the old-established King's School at Parramatta, Newington College, the Catholic Colleges at Hunter's Hill and Riverview, the North Sydney Church of England Grammar School, the Scots' College, the Presbyterian Ladies' College at Croydon, and many other first-class establishments conducted under the patronage of the various religious bodies.

#### TECHNICAL EDUCATION.

In the years which followed the great world exhibition of 1851, public attention was so strongly directed to the necessity of providing the people with the means of obtaining a scientific knowledge of the various handicrafts, that technical schools sprang up in various part of England, some being under the direct patronage of the State, whilst others were founded by the wealthy trade societies or guilds of the great English cities. The excellent results following the establishment of these schools could not fail to attract attention in the Australian States, where a sound practical knowledge of the manual arts is of paramount necessity.

The foundation of the New South Wales Technical School was due in great measure to the efforts of a few enthusiasts connected with the Sydney Mechanic's School of Arts; and, as far back as 1873, it was decided to establish a Technical College, affiliated to that institution, with the object

of improving the scientific knowledge of Australian artisans. In the year 1878 a sum of £2,000 was granted by Parliament towards the organisation of a Technical College, and for five years the work of the institution was carried on in connection with the School of Arts. In 1883, however, a board was appointed by the Government to take over its management, and the Technical College became thenceforth a State institution. Towards the end of 1899, the Board was dissolved, and the Technical College came under the direct control of the Minister of Public Instruction. The institution is now well established, and its work is already being felt and appreciated, whilst the future gives every promise of still greater usefulness. The College is housed in a fine building specially erected by the Government at Ultimo, Sydney, opened for the reception of students in January, 1892. Besides workshops containing the necessary machinery, tools, and apparatus, the College possesses an excellent museum, open to the public as well as to students.

The course of instruction of the College includes classes in agriculture, art, architecture, carpentry, &c., chemistry, cookery, dressmaking, geology, and mineralogy, iron founding, mechanical engineering, physics, printing, sanitary engineering, electrical engineering, lithography and photo-lithography, mine surveying, metalliferous mining, wood and stone carving, and wool sorting and other training in connection with sheep and wool; and these classes are subdivided as may be warranted by circumstances. At present the accommodation at the institution for some of the classes is quite inadequate, and the extension of operations is immediately necessary. While some research work has been carried on at the Technological Museum, it is recognised that the industrial technical side in particular is on a rather low plane, and efforts are being made to attain a much higher standard.

The College is open to male and female students, and in 1907 there were 718 classes in operation, of which 198 were in Sydney and suburbs, 367 in various country towns, and 153 in connection with public schools. The teaching staff consisted of 10 lecturers in charge of departments, 8 resident masters in charge of branch schools, 122 teachers, 36 assistant teachers, and 97 teachers remunerated by fees only. The enrolment of students numbered 17,662 in all, 8,110 of whom were in Sydney and suburbs, and 5,423 in the country, while 4,129 represented the enrolment of scholars from public schools. The number of individual students was 14,235, and the average weekly attendance was 11,260. Technical College buildings have been erected at Maitland, 1890; Newcastle, 1896; Bathurst, 1898; Broken Hill, 1898; Albury, 1899; and Goulburn, 1902. Apart from these country branches, Technical classes are held in over 50 centres in country and suburban districts.

In 1907, the State expenditure on technical education amounted to £33,568, but this sum does not include the cost of the Technological Museum and branches on which £4,939 was expended during the year.

#### REFORMATORIES AND INDUSTRIAL SCHOOLS.

Apart from the purely educational establishments, the State maintains several reformatories and industrial schools. For girls there is the Industrial School at Parramatta; and for boys, the Carpenterian Reformatory and the nautical schoolship "Sobraon." These institutions are under the control of the Minister of Public Instruction. At the Parramatta Industrial School the enrolment of girls during the last quarter of 1907 was 97, of whom 10 were under and 87 over 14 years of age, and the cost of maintaining the school in 1907 was £2,861.

The Carpenterian Reformatory was opened in 1895, to receive boys who have been convicted of offences, and whom it is desirable to keep apart from persons with whom they would be associated if sent to gaol. Under strict discipline, the boys are taught farming, wood-turning, carpentering, cabinet-making, french-polishing, bootmaking, tailoring, tinsmithing, painting, glazing, jam-making, and fruit preserving. At the end of 1907 there were 92 lads housed in the Reformatory, of whom 21 were under 14 years of age. The net annual State expenditure on this institution amounted to £2,413. Since its inception the institution has dealt with 739 boys, and of the 643 discharged it is estimated that fully 97 per cent. have turned out industrious citizens.

On the "Sobraon" there were 514 boys during the year 1907; of this number 413 received instruction, and 101 were exempt from school attendance, being employed on the tender "Dart" or engaged in carpentry. The admissions during the year numbered 142, and the discharges 195. On the 31st December, 1907, there were 352 boys remaining on board. During forty-one years, the institution has dealt with nearly 5,600 boys, and the records show that about 98 per cent. of these have developed into good citizens. The net cost to the State during 1907 was £12,144, the cost per head of enrolment being £21 6s. 1d. The steam and sailing schooner "Dart" is attached to the "Sobraon," and on board this vessel the boys are taught seamanship, and are afforded opportunities of putting their knowledge into practice by an occasional trip to sea. So successful has the experiment proved that a number of boys have been shipped as sailors on deep-sea vessels. The great advantage which the "Sobraon" system possesses over the ordinary penal system of the State lies in the fact that the boys who have been subjected to a course of training on board the vessel are not turned adrift on society at the expiration of their term, but are apprenticed to persons of well-known character, and thus have every opportunity of becoming respectable members of the community. The success which has attended this institution is an undoubted argument for its existence.

#### OBSERVATORY AND SCIENTIFIC SOCIETIES.

The Sydney Observatory is another of the institutions of a scientific and educational character which the State liberally supports. Situated in a commanding position, it is admirably fitted, by natural conditions, for the purpose it is intended to serve; but the growth of an immense city radiating in every direction has caused such adverse atmospheric conditions that another site will be essential at an early date. The present building was erected in 1856, at the instance of Sir William Denison, then Governor of the Colony, who took a great interest in scientific pursuits. Meteorological observations, which for many years received special attention as part of the work of the Observatory, are now directed by a special Bureau, under the administration of the Commonwealth Government. The Observatory is open to the public once a week, and during 1907 the total number of visitors was 1,302.

In this country, where most of the people are engaged in the development of its material resources, the existence of a leisured class, devoted to the pursuits of science, is hardly to be expected. Nevertheless, it is satisfactory to find that the higher aims of science are by no means neglected. As far back as the year 1821, a scientific society, under the title of the Philosophical Society of Australasia, was founded in Sydney, and after many vicissitudes of fortune was merged, in 1866, into the Royal Society

of New South Wales. The society is now in a flourishing condition, counting amongst its members some of the most eminent men in the State. Its objects are the advancement of science in Australia, and the encouragement of original research in all subjects of scientific, artistic, and philosophical interest, which may further the development of the resources of Australia, draw attention to its productions, or illustrate its natural history.

The study of the botany and natural history of Australia has attracted many enthusiastic students, and the Linnæan Society of New South Wales was established for the special purpose of furthering the advancement of these particular sciences. The society possesses a commodious building at Elizabeth Bay, one of the most beautiful spots near the city, attached to which are a library and museum. It was liberally endowed by Sir William Macleay, who, not content with being an indefatigable worker in the field of science, was also one of its most munificent supporters. The society's proceedings are published at regular intervals, and contain many valuable papers with excellent illustrations of natural history.

Among the other scientific societies are the New South Wales Zoological Society, inaugurated in 1879; also branches of the British Medical Association, founded in 1881; of the British Astronomical Association, whose first meeting was held in 1895; and of the Anthropological Society of Australasia. The Australasian Association for the Advancement of Science, and the Royal Geographical Society of Australia, also have branches in New South Wales as well as in the other States.

#### PUBLIC LIBRARIES.

The Public Library of New South Wales was established, under the designation of the Free Public Library, on the 1st October, 1869, when the building and books of the Australian Subscription Library, founded in 1826, were purchased by the Government. The books thus acquired formed the nucleus of the present library. The number of volumes originally purchased was about 16,000, and on the 31st December, 1907, they had been increased to 186,066, including those in the lending branch or lent to libraries or private students in the country. The lending branch was established in 1877 to meet a growing public want, and under the present system any person, on the recommendation of a clergyman, magistrate, or other responsible person, may obtain the loan of any of the works on the shelves, free of charge, under certain simple regulations. The scope of this institution has been further extended by the introduction of a system by which country libraries and Mechanics' Institutes may obtain on loan select works, which would be too expensive for them to purchase on account of the slender funds at their disposal. Under this system boxes are made up containing from 60 to 100 books, and forwarded to the country libraries on application, to be returned or exchanged within four months. This system was initiated in August, 1883, and has been carried on successfully ever since. In the course of the year 1907, 13,877 volumes were forwarded to 134 institutions, some of which were at considerable distances from the metropolis. Further, 1,121 volumes were sent to 14 different lighthouses, 2,543 volumes were lent to 40 different Public School Teachers' Associations, and 859 volumes were lent to 185 individual students in the country during the year. Students are expected to pay return freights on parcels, but all the other charges in connection with the despatch and return of the books are defrayed by the State, and the system in vogue in New South Wales is the most liberal of its kind in existence.

The reference department of the Public Library contains 148,259 volumes, and the lending branch 29,612. There are also 8,195 volumes for country libraries under the lending system. The books and pamphlets in the institution are classified as under:—

Synopsis of Classification.	Reference Department.	Lending Branch.	For Country Libraries.	Total
Natural Philosophy, Science, and the Arts .....	15,633	5,009	734	21,376
History, Chronology, Antiquities, and Mythology .....	8,357	4,151	1,167	13,675
Biography and Correspondence .....	6,310	4,573	1,198	12,081
Geography, Topography, Voyages and Travels, etc. ....	7,741	3,811	1,015	12,567
Periodical and Serial Literature .....	34,749	.....	322	35,071
Jurisprudence, Political Economy, Social Science, etc. ....	7,154	1,466	342	8,962
Theology, Moral and Mental Philosophy, and Education .....	7,040	1,983	663	9,686
Poetry and the Drama .....	3,750	1,054	188	4,992
General Literature, Philology, and Collected Works * ..	7,398	7,565*	2,550	17,513
Works of Reference .....	4,626	.....	16	4,642
Duplicates .....	5,155	.....	.....	5,155
"Mitchell" Library .....	10,464	.....	.....	10,464
Classified according to the Dewey System—				
1. General Works .....	3,496	.....	.....	3,496
2. Philosophy .....	586	.....	.....	586
3. Religion .....	1,146	.....	.....	1,146
4. Sociology .....	7,629	.....	.....	7,629
5. Philology .....	273	.....	.....	273
6. Natural Science .....	2,944	.....	.....	2,944
7. Useful Arts .....	4,600	.....	.....	4,600
8. Fine Arts .....	1,639	.....	.....	1,639
9. Literature .....	2,682	.....	.....	2,682
0. History (including Biography and Travel) .....	4,887	.....	.....	4,887
Total .....	148,259	29,612	8,195	186,066

\* Including 5,470 volumes of Fiction.

The popularity of the Public Library is evidenced by the number of persons availing themselves of its privileges. In 1907 the visits numbered 261,787, of which 102,318 were to the lending branch. The following table shows the number of visits paid to the Library during the last ten years:—

1898 .....	262,315	1903 .....	316,759
1899 .....	289,919	1904 .....	304,254
1900 .....	287,429	1905 .....	312,733
1901 .....	330,945	1906 .....	290,209
1902 .....	303,901	1907 .....	261,787

In addition to the 261,787 visits recorded for 1907, there were no less than 263,900 admissions to the newspaper room. Although the lending branch contains but 29,612 volumes, the total number of issues during the year was not less than 103,683, and of borrowers 8,133; so that the issues were over three times the total stock, and equal to 12·7 volumes per reader. As usual, works of fiction were extensively read, the 5,470 novels in the branch having been issued, on an average, over ten times each during the year. The number of volumes of each class taken out was as follows:—

Synopsis of Classification.	No. of volumes used.	Per cent. of total volumes.
Natural Philosophy, Science, and the Arts .....	14,128	13·63
History, Chronology, Antiquities, and Mythology .....	7,070	6·82
Biography and Correspondence .....	6,476	6·24
Geography, Topography, Voyages and Travels, etc. ....	6,155	5·94
Jurisprudence, Political Economy, Social Science, etc. ....	2,732	2·63
Theology, Moral and Mental Philosophy, and Education .....	4,534	4·37
Poetry and the Drama .....	3,152	3·04
General Literature, Philology, and Collected Works .....	3,938	3·80
Prose Fiction .....	55,498	53·53
Total .....	103,683	100·00

During 1886 and 1887 considerable extensions were made to the premises of the Public Library, which had become much too small as to sitting and shelving accommodation. The new building was opened to the public in 1890, and is one of the most convenient in Australia. In July, 1899, it was found advisable to remove the Lending Branch to a more central position in the Queen Victoria Market buildings. In 1899, the Library was incorporated, and received a statutory endowment of £2,000 per annum for the purchase of books. It has also benefited by the munificence of Mr. D. S. Mitchell, who, in 1899, made a donation of 10,024 well-chosen volumes, together with 50 valuable pictures, and at the same time intimated his intention of bequeathing the whole of his unrivalled Australian collection, and of providing an adequate endowment. This collection will be kept separate, and be known as the "Mitchell" Library. A fine structure has been erected to accommodate it.

The cost of the Public Library to the State during 1907 was £9,194, the details of expenditure being as follows:—

	£
Books, Periodicals, and Binding ... ..	1,770
Salaries ... ..	6,025
Miscellaneous—Cleaning, Freight, Repairs, &c. ... ..	1,399
<b>Total ... ..</b>	<b>£9,194</b>

The editing of the Historical Records of New South Wales, and the administrative work in connection with the Board for International Exchanges are also performed by the Library staff.

Small local libraries are established in the principal population centres throughout the State. These may be classed broadly under two heads—Schools of Arts, receiving an annual subvention in proportion to the amount of monetary support accorded by the public; and Free Libraries, established in connection with municipalities. Those of the former class preponderate. Under the provisions of the Local Government Act of 1906, any shire or municipality may establish a public library, art gallery, or museum. At the end of 1907 there were 35 municipal libraries in the State with 30,384 volumes.

The principal public libraries, with the number of volumes in each at the end of 1907, is shown in the following statement:—

Name of Library.	Number of Departments.	Total number of volumes.
Sydney University ... ..	1	80,000
Public Library and Lending Branch ... ..	2	186,066
Australian Museum ... ..	1	14,287
Botanical Museum ... ..	1	4,000
State Schools ... ..	1,153	130,000
Sydney Technical College and Branches ... ..	6	5,374
Schools of Arts ... ..	247	307,592
Municipal Libraries ... ..	35	30,384
Mechanics' and Other Institutes ... ..	22	89,280
<b>Total ... ..</b>	<b>1,468</b>	<b>846,983</b>

In addition to the above there are a large number of private circulating libraries, which are extensively patronised.

#### NATIONAL ART GALLERY.

The National Art Gallery contains an excellent collection of paintings and statuary, including some of the most famous works of the best modern artists of the Old World, also several very valuable gifts from private persons. The collection of Water Colours is considered to be the finest out of England. It is estimated that the present value of the contents

of the Gallery is at least £136,000. During 1907 the Gallery was visited by 260,832 persons, the average Sunday attendance being 1,830, and on week-days 532. Art students have access, and, under certain regulations, may copy any of the various works. In 1894 a system of loan exchanges between Sydney, Melbourne, and Adelaide was introduced. By this arrangement pictures are sent from Sydney to Melbourne and Adelaide, and others are received from those cities in exchange, with results most beneficial to the interests of art. Another excellent scheme was initiated in July, 1895, by which collections of pictures are sent to the principal country towns for temporary exhibition. At the close of 1908, the total expenditure on the National Art Gallery, inclusive of the building, amounted to £242,737, of which £102,705 had been expended on works of art. The disbursements during 1907 were:—

	£
For works of art ... ..	3,754
For maintenance, including freight, frames, repairs, and insurance	978
For salaries ... ..	2,028
<b>Total cost to the State ... ..</b>	<b>£6,760</b>

#### MUSEUMS.

The Australian Museum, the oldest institution of its kind in Australia, contains a collection of carefully-selected specimens of the principal objects of natural history, also a complete collection of zoological specimens of distinctly Australian character. The popularity of the institution is evidenced by the increasing number of visitors, of whom there were, during 1907, 172,450, the daily average being 638 on Sundays, and 528 on other days. The expenses in connection with the institution amounted to £8,337, of which £1,492 was expended on account of purchase, collection, and carriage of specimens, and purchase of books. A fine library is attached to the institution, containing many valuable publications, the total volumes numbering 14,287. The specimens acquired during 1907 numbered 17,006.

The Technological Museum was instituted at the close of 1879 on the initiative of the Trustees of the Australian Museum; but the whole original collection of some 9,000 specimens was totally lost in 1882 by the Garden Palace fire. Strenuous efforts were at once made to replace the lost collection, and in December, 1883, the museum was again opened to the public, and now contains interesting and valuable series of specimens illustrating the various stages of many manufactures, and an excellent collection of natural products. The popularity of the institution may be gathered from the fact that 79,190 persons visited it during 1907. There are branch Technological Museums at Goulburn, Bathurst, West Maitland, Newcastle, and Albury, which were visited by 124,279 persons during 1907. The sum of £4,939 was expended on the various institutions of this nature during 1907.

Connected with the Department of Mines and Agriculture is a Mining and Geological Museum, which is open to the public on week-days. Amongst other important work, the institution prepares collections of minerals to be used as teaching aids in the public schools. Connected with this institution is an Agricultural and Forestry collection containing 6,456 specimens.

The "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History, the Museum of Normal and Morbid Anatomy, attached to the Sydney University, and the National Herbarium and Botanical Museum at the Botanic Gardens, are all accessible to the public free of charge.

## RELIGION.

THERE is absolute liberty of conscience in New South Wales with respect to religious belief, but during the early days of the State's history such was not the case. New South Wales was originally a Crown Colony, and the Church establishment as it existed in England was naturally transplanted to these shores. Ecclesiastical monopoly, however, continued only for a short time, and the countenance and support of the State were extended, during the governorship of Sir Richard Bourke, to the principal religious bodies—the Anglicans, Roman Catholics, Presbyterians, and Wesleyan Methodists. To the clergy of each of these denominations the Government granted subventions which continued long after the introduction of Responsible Government.

In 1862, however, an Act was passed limiting future payments to the clergy then actually in receipt of State aid. In the year following the passing of this Act, the claims on the Government amounted to £32,372, thus distributed :—

Church of England	... £17,967	Presbyterian	... £2,873
Roman Catholic Church...	8,748	Wesleyan Methodist	... 2,784

Year by year the sum payable has been decreasing, owing chiefly to the deaths of clergymen in receipt of State aid, so that during the year ended June, 1908, the payment by the State was £1,643, distributed as follows :—

Church of England	... £1,031.	Presbyterian	... £150
Roman Catholic Church	... 450	Wesleyan Methodist	... 12

The payments to the clergy of the several denominations are given for various periods since 1863. It will be observed that in some years the amounts paid were less than in succeeding years. This anomaly is due to the temporary stoppage of the stipends of clergymen who were absent from the State :—

Year.	Church of England.	Roman Catholic Church.	Presbyterian.	Wesleyan Methodist.	Total—All Denominations.
	£	£	£	£	£
1863	17,967	8,748	2,873	2,784	32,372
1891	5,347	2,570	702	875	9,494
1901-2	2,116	1,000	475	438	4,029
1902-3	1,532	896	281	307	3,036
1903-4	1,431	603	300	300	2,634
1904-5	1,431	575	300	300	2,666
1905-6	1,189	650	300	177	2,316
1906-7	1,036	575	193	150	1,954
1907-8	1,031	450	150	12	1,643

The number of ministers of religion entitled to State aid during 1907 was 11—7 clergymen of the Church of England, 2 Roman Catholics, 1 Presbyterian, and 1 Wesleyan Methodist.

At the Census of 1901 the number of adherents to each of the denominations, with the clergy registered for the celebration of marriages, was as given below:—

Denomination.	Clergy.	Adherents.	Proportion of adherents of each Denomination.
			per cent.
Church of England .....	363	623,131	46.58
Roman Catholic .....	299	347,286	25.96
Methodist .....	200	137,638	10.29
Presbyterian .....	182	132,617	9.91
Congregationalist .....	51	24,834	1.86
Baptist .....	37	16,618	1.24
Lutheran .....	5	7,387	.55
Salvation Army .....	10	9,585	.72
Christian, Other .....	27	13,635	1.01
Non-Christian .....	5	15,252	1.15
No religion .....	.....	9,829	.73
Object and unspecified .....	.....	17,034	.....
Total .....	1,179	1,354,846	100

Taking the whole population, there were 1,149 persons on an average to each clergyman.

Formerly, religious statistics were collected every year. It has now been decided to have only one collection half way between the Census periods, so that new figures will be available every five years. The figures given below refer to the year 1904, when the latest collection was made. In that year the number of persons of 14 years of age and over attending Divine Service on Sundays averaged 385,627. In view of the sparseness of the population in some parts of the country, the church attendance appears fairly satisfactory. In 1881 the Church of England had the largest attendance, but from 1884 the Church of Rome has taken the lead.

The figures showing the attendance at Divine Service on Sundays for each of the principal denominations are given hereunder, but much reliance cannot be placed on the results, as it has been found difficult to secure thoroughly complete returns. It must be remembered, also, that the totals for each denomination include attendants other than actual adherents. This is especially the case as regards the Salvation Army, which showed an attendance of 16,000 persons at Sunday services, while the total members of this religious persuasion at last Census numbered only 9,585.

Denomination.	Estimated number of persons over 14 years of age attending Divine Service on Sundays.	Total number attending Divine Service on Sundays.
Church of England .....	94,877	116,833
Roman Catholic .....	104,829	136,077
Methodist .....	93,655	113,705
Presbyterian .....	50,316	62,998
Congregational .....	11,707	14,200
Baptist .....	8,470	10,183
Salvation Army .....	16,000	19,350
Other Denominations .....	5,773	7,465
Total .....	385,627	480,811

The Church of England is the largest religious denomination in the State, whether regarded as to the number of professed adherents, the number of clergy, or the number of buildings used for Divine Service. During the year 1904 there were 791 churches belonging to this denomination, and 893 buildings and dwellings used for public worship, accommodating altogether 143,103 persons. The estimated number of attendants at public worship on Sunday, including children under 14 years of age, was 116,833, and, exclusive of children, 94,877, and in 1908 the number of clergy registered for the celebration of marriages was 438. The Church hierarchy consists of a Metropolitan, the Archbishop of Sydney, who is Primate of Australia and Tasmania, and five other Bishops, whose sees are Newcastle, Goulburn, Bathurst, Grafton and Armidale, and Riverina. By an Act passed in 1881 provision was made for the creation of corporate bodies of trustees, in which property belonging to the Church of England may be vested, and trusts for various dioceses have been formed under the Act. They are entitled to hold, on behalf of the Church, all real and personal property which may be assigned to them by grant, will, or otherwise. In each diocese a Synod, consisting of clerical and lay representatives from each district, presided over by the Bishop meets annually to make ordinances for the government of the Church. Each diocesan synod elects from its members representatives to sit at the Provincial Synod of New South Wales, which meets every three years, and to the General Synod of Australia, which meets every five years under the presidency of the Archbishop of Sydney.

The Roman Catholic Church is presided over by the Cardinal Archbishop of Sydney, assisted by a Coadjutor Archbishop. Under the Archbishop are the Suffragan Bishops of Maitland, assisted by a Coadjutor, Goulburn, Bathurst, Armidale, Wilcannia, and Lismore, the whole State forming an ecclesiastical province. No fewer than thirty-three religious orders are represented in the State. In 1908 there was 361 priests licensed to celebrate marriages. The number of Roman Catholic churches in 1904 was 576; besides these, there were 709 buildings or dwellings used for Divine Service. The accommodation afforded by the churches and buildings amounted to 135,063, and the attendance of adherents of 14 years of age and over was 104,829, while the total number of attendants of all ages was 136,077.

The various branches of the Presbyterian Church in the State had, during 1904, 362 churches used for public worship; there were also 705 public buildings or dwellings occasionally used for the same purpose. The accommodation provided in churches and buildings was 58,275 sittings, and the attendance of habitual adherents numbered about 50,316, and, including children, 62,998. For the purposes of this Church, the State is divided into fourteen Presbyteries, each comprising a number of separate charges, to each of which a Minister is appointed. The management of the affairs of the Church is controlled by a General Assembly, which sits annually, and consists of Ministers and Elders from the charges within the different Presbyteries. It is presided over by a Moderator, who is elected by the Presbyteries. By Act of Parliament, the Assembly has power to grant permission to trustees to mortgage Church property, and trustees are authorised to hold property for the Church generally. In July, 1901, a scheme of federal union was adopted by representatives from the various States, and the United Church is called the Presbyterian Church of Australia. The number of ministers licensed to celebrate marriages in 1908 was 214, of whom 207 were connected with the Presbyterian Church of Australia, 6 with the Presbyterian Church Synod of

Eastern Australia, and 1 with the Presbyterian Church of Eastern Australia as reconstituted.

On the 1st January, 1902, the Wesleyan Methodist Church, the Primitive Methodist Church, and the United Methodist Free Churches in New South Wales entered into organic union, with a common name, common funds, common laws, and equal rights. The name given to the United Church was "The Australasian Wesleyan Methodist Church," but it was arranged that when the union has become general throughout Australasia the Church shall be known as "The Methodist Church of Australasia."

In this State during 1904 the Methodist body used for public worship 572 churches and 548 other buildings, with sitting accommodation for 95,334 persons. The estimated attendance on Sundays was 93,655, or including children, 113,705. In 1908 the clergy licensed to celebrate marriages numbered 248.

The Congregational Church had 79 churches, as well as 49 buildings or dwellings used for worship; and the sittings provided could accommodate 21,458 persons. The attendance at Divine Service on Sundays averaged 11,707, or, including children, 14,200, and the clergy licensed to celebrate marriages in 1908 numbered 63.

The various Baptist Churches in the State in 1904 had 59 churches and 69 other buildings devoted to public worship; the Sunday attendance averaged 8,470, and, including children, 10,183 persons. The number of clergy licensed to celebrate marriages in 1908 was 49. The Baptist Union of New South Wales is not incorporated, and so cannot legally hold property in trust for the denomination. Annual sessions, with half-yearly assemblies, are held. For several sessions a draft constitution has been under the consideration of the Union, which, amongst other matters, provides that all properties which now belong or may hereafter accrue to the Union shall be held under a Model Trust Deed, by trustees to be duly appointed; but the matter of incorporation remains in abeyance.

The Salvation Army was established in Australia in 1882. Melbourne was made the chief centre for Australasia under the command of a Commissioner, and Sydney was constituted the headquarters for New South Wales, with a separate chief officer, who is termed Colonel-in-command, all officers and members bearing military titles and designations. There are also treasurers and secretaries to corps. Persons who are in sympathy with the Salvation Army, but who have not subscribed to the "Articles of War"—which combine a confession of faith and a pledge against the use of intoxicating liquors and baneful drugs—form an Auxiliary League and contribute to the funds of the Army. Persons desirous of membership are publicly received on one month's probation, and, after signing the "Articles of War," are attached to the corps nearest their place of residence. The Army had 337 buildings used for service, accommodating 45,000 persons. The number of persons attending public worship on Sundays was estimated at 16,000, or, including children, 19,350. There were 17 officers licensed to celebrate marriages in 1908.

In addition to those above enumerated, there are other distinct religious bodies, for the most part of Protestant denomination, with clergy licensed by the State to celebrate marriages. The number of clergy ministering to these in 1908 was 58; the churches and other buildings used during 1904 for Divine Service numbered 101; and the attendance was about 6,000 persons.

The number of registered ministers belonging to all faiths was 1,313, and the churches numbered 2,612, in addition to which there were 3,238 dwellings or other buildings used for public worship. Accommodation was provided for 526,897 persons. The average attendance on Sundays

was about 385,627, or, including children under 14 years of age, 480,811 persons. During 1908 the ministers of all religious denominations registered for the celebration of marriages within the State numbered 1,418

Nearly all the religious bodies maintain Sunday-schools. The attendance of children at the Sunday-schools of the leading denominations, with the number of schools and teachers during 1904, was:—

Denomination.	No. of Schools.	Teachers.			Scholars on the Roll.			Estimated Average Attendance.
		Males.	Females.	Total.	Males.	Females.	Total.	
Church of England...	761	1,342	3,473	4,815	26,492	34,505	60,997	43,025
Roman Catholic ...	639	229	1,271	1,500	15,879	21,245	37,124	29,505
Methodist ...	489	1,522	3,173	4,695	18,819	22,881	41,700	27,697
Presbyterian ...	320	754	1,461	2,215	9,421	12,059	21,480	15,331
Congregational ...	82	357	530	887	3,675	4,844	8,519	5,987
Baptist ...	57	254	293	547	2,290	2,922	5,212	3,834
Salvation Army ...	124	179	300	479	2,500	3,000	5,500	3,980
Other Denominations	61	144	243	387	1,436	2,319	3,755	2,875
Total...	2,533	4,781	10,744	15,525	80,512	103,775	184,287	132,234

The attendance shown in the preceding table amounts to about 45 per cent. of the total children between the ages of 7 and 15 years, inclusive, at which ages children generally attend Sunday-schools. The number of Sunday-schools and teachers, and the attendance at various intervals since 1891, were as follows:—

Year.	Number of schools.	Number of teachers.	Average attendance of Scholars.		
			Male.	Female.	Total.
1891	1,887	12,169	54,932	68,592	123,524
1897	2,167	13,748	55,960	72,420	128,380
1900	2,286	14,607	55,942	74,595	130,537
1904	2,533	15,525	57,320	74,914	132,234

## SOCIAL CONDITION.

THE efforts of the authorities in New South Wales in the cause of charity are directed mainly towards the rescue of the young from criminal companionship and temptation to crime, to the support of the aged and infirm, and the care of the imbecile or insane; also in granting assistance to private institutions for the cure of the sick and injured, and to societies established for the purpose of relieving the pressing necessities of those of the poorer classes who, through improvidence, and lack of employment by the breadwinner of the family, find themselves temporarily in want.

In addition to State-aided institutions, there are numerous other private charities whose efforts for the relief of the afflicted are beyond all praise.

The rescue of the young from crime is attempted by means of Industrial Schools, where children who have been abandoned by their natural guardians, or who are likely, from the poverty or incapacity of their parents, to be so neglected as to render them liable to lapse into crime, are trained, educated, and afterwards apprenticed to useful callings. Reformatories are provided where children who have already committed crime are placed under discipline.

### PUBLIC HOSPITALS.

Hospitals are essential, especially under the pioneering conditions of life in the country districts of the State, and they are accordingly found in every important country town. At the close of the year 1907 there were 136 hospitals in operation in the State, of which 128 were subsidised by the Government.

The number of beds in these institutions was 4,345. During the year 44,667 persons were under treatment as indoor patients, and the number remaining in hospital at the close of the year was 2,767. The average time during which each person was under treatment was : of those who died—males 16 days and females 16 days; and of those who were discharged—males 23 days and females 25 days.

The following statement shows the number of admissions, discharges, and deaths for the past ten years :—

Year.	Total Patients under treatment.	Number Discharged as cured or relieved	Deaths.		Number of Patients at the close of year.
			Number.	Per cent. of treated.	
1898	29,604	25,425	2,302	7.8	1,877
1899	29,770	24,752	2,241	7.5	1,880
1900	30,592	25,269	2,336	7.6	2,055
1901	33,012	27,426	2,477	7.5	2,247
1902	34,426	28,750	2,594	7.5	2,237
1903	37,011	30,954	2,660	7.2	2,491
1904	38,430	32,751	2,431	6.3	2,467
1905	38,646	32,872	2,529	6.5	2,536
1906	41,552	35,492	2,576	6.2	2,574
1907	44,667	38,152	2,767	6.2	2,767

The average number resident throughout the year 1907 was 2,885. The increase in the number of patients has been fairly regular, so that the proportion of the population to be found in hospitals is about the same in each year, the average in 1907 being 1.9 per thousand.

The death-rate per 100 persons under treatment during 1907 was 6.2, which is 13 per cent. below the decennial average. The death-rate in hospitals of New South Wales compared with those of Europe is undoubtedly very high, but this to a large extent is owing to the number of deaths from accidents, which form a very considerable proportion of the total number registered—a circumstance due to the nature of the occupations of the people, and the dangers incidental to pioneering enterprise. A large majority of the accidents that occur, when not immediately fatal, are treated in the hospitals; and these institutions, especially in country districts, are for the most part maintained for the treatment of surgical cases.

Applications for Government orders for treatment at the metropolitan hospitals are made to the Government Medical Officer, and it is the duty of that officer to assign the cases to the different hospitals and asylums in accordance with the nature, severity, and special character of the ailments from which the patients are suffering, and with the accommodation available at the various institutions. The number of orders granted during 1907 was 8,548, as compared with 8,378 in the preceding year, these figures representing cases, not individuals, as the same person may be in an institution several times during the year.

There are also seven Hospitals for Insane which are under Government control, and which are fitted with all the conveniences and appliances of modern science most calculated to mitigate or remove the affliction.

#### EXPENDITURE ON HOSPITALS.

The amount expended by the State in the year 1907–08 for the maintenance of the sick poor was £19,824, the principal beneficiaries being the Sydney Hospital, the Prince Alfred Hospital, the Moorcliff Hospital, each at £35 per bed, and the Carrington Convalescent Hospital, at £17 10s. per bed.

According to the hospital accounts, the total expenditure of the Government in connection with the hospitals in the Metropolitan area in 1907 was £69,223; and on the country hospitals the expenditure reached £59,467, the total expenditure for the State being £128,690. These amounts are irrespective of payments for attendance on Aborigines, expenses in connection with special outbreaks of disease in country districts which are met from the general medical vote; and the maintenance in the Asylums for the Infirm and Destitute of a large number of chronic and incurable hospital cases.

There is little exact information respecting the outdoor relief afforded by hospitals, this form of charity not being so important as indoor relief; nevertheless, the number of out-door patients during 1907 was returned as 94,093.

Since 1902 a Dental Hospital has been in existence for the benefit of the poor. The number receiving relief in 1907 was 7,689.

Omitting from consideration the Government establishment at Little Bay, the expenditure in 1907 on all the hospitals of the State, for purposes other than building and repairs, was £195,636, representing an average of £48 13s. 1d. per bed. This sum is somewhat in excess of the truth, as a deduction should be made for out-patients, but the information is not available. The average cost of each indoor patient treated was £4 14s. 8d.

The total revenue of hospitals, excluding that at Little Bay, was £245,832. The following statement shows the revenue and expenditure for the year 1907:—

Revenue and Expenditure.	Metropolitan.	Country.	New South Wales.
Receipts—	£	£	£
Government aid ... ..	49,930	59,467	109,397
Private contributions ... ..	46,156	75,782	121,938
Other sources ... ..	9,192	5,305	14,497
Total Receipts ... ..	105,278	140,554	245,832
Expenditure—			
Building and repairs ... ..	10,983	28,397	39,380
Maintenance (including salaries) ...	79,455	96,575	176,030
Miscellaneous ... ..	9,903	9,703	19,606
Total Expenditure ... ..	100,341	134,675	235,016

The expenditure in connection with the Little Bay Hospital has not been included in the figures stated above, as that institution is entirely in the hands of the Government. At this hospital 3,322 patients were treated during the year at the cost of £19,293. The total expenditure of the State on hospitals amounted, therefore, to £254,309. The number of lepers under detention at the lazaret on the 31st December, 1907, was 22.

Besides hospitals proper, there exist other humane institutions. Of such are the homes for the reception of fallen women; for the treatment of the blind, deaf, and dumb; for the relief of consumptives; for ministering to the wants of destitute women; for granting casual aid to indigent persons; for the help of discharged prisoners, and for many other purposes which elicit the charitable aid of the people.

The Infants' Home, Ashfield, the Alexandra Hospital for Children, Camperdown, the Institution for the Deaf and Dumb and the Blind, Darlington, besides other institutions in different parts of the State, receive help from the Government; but they are maintained principally by private contributions. The management of almost all institutions for the relief of the sick is in the hands of committees elected by persons subscribing towards their support.

At the City Night Refuge and Soup Kitchen there were no less than 81,392 meals given during 1907, and shelter was provided in 30,080 instances.

#### DESTITUTE CHILDREN.

The charge of the destitute or neglected children of the State is entrusted to the State Children Relief Board, constituted under an Act of Parliament, which commenced its operations in the year 1881. During the twenty-seven years of its existence the Board has dealt with no less than 15,520 children, who have been removed for boarding-out from the State institutions of the province, and from others partly supported by public contributions. Of that number 11,300 children had been discharged to their parents or otherwise removed from the control of the Board, so that there were remaining under its charge on the 5th April, 1908, 4,202, of whom 2,373 were boys and 1,829 were girls. Of these children, 2,303 (1,320 boys and 983 girls), were boarded out to persons deemed to be eligible after strict inquiry by the Board.

The rates of payment range up to 10s. per week, the highest rates being paid for infants under 1 year, who require more than ordinary care. A strict supervision is exercised by the officers of the board to prevent ill-treatment or neglect, and there are, in addition, voluntary lady visitors acting in the various districts who keep a constant watch upon these unfortunate children. About 4,500 children have grown up and been taught useful trades and profitable occupations, many of whom would otherwise have drifted into the criminal or pauper population.

The system of placing delicate young children out to nurse with healthy matronly women in the country districts has been found to work well. In April, 1908, there were 167 such children under control, at a total annual cost of about £3,429; and there were 210 children under the control of guardians, at no charge to the State. Of the apprentices, nearly all the girls were in domestic service, the greater proportion of the boys were with farmers, orchardists, storekeepers, and artisans in healthy country districts. On the whole the apprentices are turning out remarkably well, and very few serious complaints are received either from the children or from their guardians. The system pursued by the Board of extending to the dependent children of this country the privileges of family life and home training in place of the monotonous and artificial style of living in large asylums has been attended with successful results. The cost to the State for maintenance, calculated on the daily average, after deducting parents' contributions, was equal to £15 10s. 2d. per child.

In 1906 a probationary training home was opened at Mittagong for neglected and uncontrollable boys brought before the Children's Court. The home is particularly designed to deal with wayward lads, whose records would not justify their being boarded with private families, but whom it is not desirable to send to a reformatory.

In April, 1908, there were 1,405 widows and deserted wives receiving allowances towards the support, in their own homes, of 3,633 children under 12 years of age.

The number of children provided for apart from their mothers under the control of the Board at five-year intervals since 1881 is shown in the following table. During 1907 the deaths numbered 61, of which 40 were males and 21 females:—

Year ending April.	Boys.	Girls.	Total.	Year ending April.	Boys.	Girls.	Total.
1881	24	35	59	1901	2,205	1,705	3,910
1886	779	587	1,366	1906	2,114	1,776	3,890
1891	1,417	952	2,369	1907	2,230	1,794	4,024
1896	1,954	1,502	3,456	1908	2,373	1,829	4,202

Of the 4,202 children under control in April, 1908, there were 2,652 entirely supported either as boarders with foster parents or as inmates of the Cottage Homes, Depot or Hospitals; 1,340 were apprenticed, and 210 adopted without payment.

The following table shows, for a period of five years, the ages of children when received by the Board:—

Age.	1904.	1905.	1906.	1907.	1908.
Under 1 year ...	31	48	65	60	89
1 year ...	35	25	40	46	40
2 years ...	40	52	33	31	39
3 " ...	30	27	29	26	27
4 " ...	49	36	35	23	33
5 " ...	32	36	42	29	49
6 " ...	52	47	35	38	40
7 " ...	48	51	50	42	48
8 " ...	46	52	45	34	41
9 " ...	45	36	42	46	45
10 " ...	40	47	55	38	80
11 " ...	32	29	37	55	70
12 " and over ...	49	56	84	122	158
Unknown ...	85	70	62	106	141
Total ...	614	612	654	696	900

The large increase shown upon comparison of the year 1908 with that of 1907, is explained by the larger number of children placed under the control of the Board by the Children's Courts.

During 1908, of the 900 children shown above, 479 were boarded out direct from the State Children's Depôt, 70 were received from the Benevolent Asylum, 20 from the Industrial School for Girls, 20 from other charitable institutions, and 311 were committed from the Children's Courts.

The gross amount expended by the Government during the year on the State Children's Relief Department, including the Parramatta and Mittagong Cottage Homes, was £75,910, and parents' contributions towards the maintenance of their children amounted to £3,024, leaving the net Government expenditure at £72,886.

The number of destitute children in State institutions, including children boarded-out and paid for by the Government, and in private institutions, at the end of each of the past ten years, was as follows:—

Year.	In State Institutions.	In Private Institutions.	Total.	Per 1,000 of Population.	Year.	In State Institutions.	In Private Institutions.	Total.	Per 1,000 of Population.
1898	3,083	1,286	4,369	3·30	1903	3,025	1,541	4,566	3·19
1899	3,070	1,381	4,451	3·31	1904	3,012	1,600	4,612	3·16
1900	3,035	1,381	4,416	3·24	1905	2,954	1,591	4,545	3·04
1901	2,834	1,446	4,280	3·10	1906	3,117	1,388	4,505	2·94
1902	2,950	1,523	4,473	3·18	1907	3,183	1,485	4,668	2·97

In 1907 the number of destitute children was 4,668, or 2·97 per 1,000 of total population; 2,652 were State children supported by the Government, 531 were in industrial schools and reformatories, and 1,485 were in private institutions.

There are three reformatories, viz., the Parramatta Industrial School for girls; the "Sobraon" training-ship for boys; and the Carpenterian Reformatory at Eastwood, also for boys. The training-ship for a long time was used practically as a reformatory as well as an industrial school. In August, 1905, however, the Carpenterian Reformatory was opened, and arrangements were made to receive therein criminal boys, and subject to proper discipline, to teach them useful trades. On the "Sobraon" there were 514, in the Parramatta Industrial School for Girls 149, and in the Carpenterian Reformatory 174 inmates during 1907.

## DESTITUTE ADULTS.

The number of destitute adults, or persons 15 years of age and over, who were inmates of the various asylums of the State at the close of the year 1907, was 4,830, of whom 3,522 were males and 1,308 females. The great majority of those in the asylums are persons of very advanced years who are unable to work. The inmates of the Benevolent Asylum, Sydney, however, and of a number of similar institutions, form an exception to this rule, as a large proportion of them are destitute women who use the institutions as lying-in hospitals.

The following table shows the number of adults remaining in the various Benevolent Asylums at the end of each of the last ten years:—

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1898	3,501	1,393	4,894	1903	3,728	1,324	5,052
1899	3,606	1,476	5,082	1904	3,935	1,358	5,293
1900	3,579	1,489	5,068	1905	3,869	1,342	5,211
1901	3,591	1,368	4,959	1906	3,722	1,294	5,016
1902	3,188	1,342	4,530	1907	3,522	1,308	4,830

About 80 per cent. of the above persons are inmates of asylums maintained by the Government. The Liverpool Asylum, the Rookwood Asylum, and the two large institutions at Parramatta, are homes for males; the Benevolent Asylum, Sydney, is for women and children; and the institution at Newington is used chiefly for females. Old and indigent married couples have the use of the cottage homes, Parramatta, which were opened in March, 1889.

During 1907 the deaths of 785 adults took place in the various institutions.

In addition to the indoor relief, considerable aid is extended to the outside poor. Apart from medical advice and medicines, outdoor relief consists largely of supplies of provisions.

Adding together the numbers of adults and children, in order to show the number of all the destitute in the State, we obtain the following results:—

Year.	Children.	Adults.	Total.
1881	1,816	1,360	3,176
1886	1,929	1,925	3,854
1891	2,258	3,089	5,347
1896	4,322	4,165	8,487
1901	4,280	4,959	9,239
1906	4,505	5,016	9,521
1907	4,668	4,830	9,498

The proportion of paupers has remained fairly constant during recent years, but has increased considerably since 1891.

The receipts and disbursements of the charitable institutions in the State during the year 1907 were as shown below. The figures do not include the money received and expended by several denominational institutions, the financial condition of which is not made public:—

Receipts—	£	Disbursements—	£
Government aid ..	138,813	Buildings and repairs ...	5,937
Private contributions ...	30,189	Maintenance (including salaries) ...	182,840
Other sources ...	35,361	Other expenses ...	13,530
		Balance ...	2,056
Total ...	£204,363	Total ...	£204,363

## PROTECTION OF THE ABORIGINES.

A Board is in existence for the protection of the aborigines, the object of which is to ameliorate the condition of the blacks, and to exercise a general guardianship over them. There are nine stations for the benefit of the aborigines. The natives at the settlements are comfortably housed, and are encouraged to devote their energies to agricultural and kindred occupations, and elementary education is imparted to the children.

The amount expended by the Government during 1907 for the benefit of the aborigines was £13,498.

## INFANT PROTECTION ACT.

The "Infant Protection Act" is designed for the protection, maintenance, and education of infants, and to provide for the inspection and control of places established or used for their reception and care.

In addition to the affiliation clauses, the Act provides that "the person in charge of any place established or used for the reception and care of two or more infants under 7 years of age apart from their mothers shall make application to the Minister for a license of such place." The license is issued by the Minister, and the State Children Relief Board reports to the Minister as to the propriety of granting the license. Several applications for license have been investigated and recommendations made for their issue on specified conditions.

The licensed places have been divided into two classes—one for the reception of five or less children, which includes ordinary homes, and the other for six children and over, being mostly institutions of a charitable nature for the care of infants. In the first class, 97 homes were licensed during the year ended 31st December, 1907; and in the second class thirteen applications were granted to institutions which have accommodation for six to seventy-five children. At the end of the year, 189 children, of ages ranging up to 7 years, were under care in these institutions. With the exception of the Infants' Home, Ashfield, which is subsidised by the Government, they are supported entirely by voluntary contributions.

The Sydney Benevolent Asylum and the Randwick Asylum, operating under special Acts, have obtained exemption from the provisions.

## TOTAL EXPENDITURE ON CHARITY.

The total expenditure by the State in aid of hospitals, hospitals for the insane, and other charitable institutions, amounted in 1907 to £486,689; adding to this the amount of private subscriptions, donations, and other receipts of hospitals, &c., the poor and the unfortunate received sustentation to the extent of about £743,600.

The expenditure by the Government during the year 1907 upon hospitals and asylums, small charities, and State children, was £344,523. Private subscriptions, donations, and other receipts amounted to £256,931, distributed amongst the various institutions as follows:—Hospitals, £136,435; Hospitals for Insane, £29,555; State Children's Relief Board, £3,024; Charitable Institutions, £65,550; Charitable Societies, £21,410; and Aborigines Protection Board, £957.

It was anticipated by the introducers of the Old-age Pension scheme that there would be a reduction in the Government expenditure on charity, especially in asylums. The expectation was, however, without reasonable foundation, as the classes of people affected by the two systems of relief are widely different; and no reduction can be seen in the figures in the following table, which shows the expenditure on poor relief in 1900, the year before the Old-age Pension came into force, and in 1907:—

Relief on which expended.	1900.		1907.	
	Expenditure.	Per head.	Expenditure.	Per head.
	£	s. d.	£	s. d.
Hospitals ... ..	88,463	1 4	123,690	1 8
Asylums ... ..	125,368	1 10	133,813	1 9
Charitable Societies ... ..	7,130	0 1	4,134	0 1
State Children's Relief ... ..	42,422	0 8	72,886	0 11
Hospitals for Insane ... ..	103,852	1 6	123,668	1 8
Protection of Aborigines ... ..	17,849	0 3	13,498	0 2
Total—Hospitals and Charities	385,084	5 8	486,689	6 3
Old-age and Invalidity Pensions...	.....	.....	538,131	6 11 .
Total ... ..	385,084	5 8	1,024,820	13 2

These figures include maintenance of patients, and wages and salaries in connection with each establishment and the administrative department generally. The cost of Old-age and Invalidity Pensions in 1907 amounted to 6s. 11d. per head, and of all other forms of charity to 6s. 3d. per head; so that after the cost of the pensions has been excluded, the expenditure on hospitals and charities has increased by 7d. per head since 1900.

#### OLD-AGE PENSIONS.

The old-age pension scheme sanctioned by the Parliament of New South Wales specifies a pension of £26 a year, diminished by £1 for every £1 of income above £26 a year, or by £1 for every £15 of property that the pensioner possesses. Where a husband and wife are entitled to a pension, the amount is fixed at £19 10s. a year each, unless they are living apart under a judicial decree or a deed of separation, when the full sum of £26 is payable. To obtain a pension, the applicant must be 65 years of age, and have resided in the State not less than twenty-five years. There are also other qualifications relating to good citizenship. No alien, Australian aboriginal, nor Asiatic is entitled to a pension. Persons under 65 years of age, but over 60 years, are entitled to pensions if they are incapacitated by sickness or injury from earning their livelihood, but debility due merely to age is not considered as an incapacitating sickness. The old-age pension is a gift by the State to citizens who, during the prime of life, have helped to bear the public burthens of the State by the payment of taxes, and by opening up its resources by their labour and skill.

The pension system came into force on the 1st August, 1901, at which date 13,957 pensions were granted, involving a monthly payment of £28,037. The pension list gradually increased as persons entitled to claim proved their qualifications, and on the 1st July, 1902, the number of pensioners was 22,252, the monthly pension bill being £44,362. This is the highest point yet attained.

The following statement shows on the 1st August of each year since the system was established, the number of pensioners and the annual pension rate:—

Year.	No. of Pensioners.	Annual Pension Rate. £
1901	13,957	336,444
1902	22,182	531,816
1903	20,905	500,340
1904	20,438	487,404
1905	20,483	485,916
1906	20,817	491,088
1907	20,963	500,208
1908	21,345	512,148

The average annual pension is about £23 6s. 3d., and has varied very little since the system came into force.

During the seven years the pension system has been in operation—i.e., to 1st August, 1908—11,923 pensioners died, and 1,952 pensions were cancelled. The death-rate represents 83·1 per 1,000 pensioners, which is only slightly in excess of the general average for persons of 65 years of age and upwards.

The total amounts which have been appropriated for the payment of old-age pensions during each financial year up to 30th June, 1908, are as follow:—

Year.	Amount appropriated. £	Per head of Population. s. d.
1901-2 ... ..	436,183	6 4
1902-3 ... ..	524,967	7 6
1903-4 ... ..	508,133	7 2
1904-5 ... ..	496,300	6 10
1905-6 ... ..	489,095	6 7
1906-7 ... ..	494,227	6 6
1907-8 ... ..	503,030	6 6

#### INVALIDITY AND ACCIDENT PENSIONS.

In 1907 an Act was passed by which pensions, up to £26 a year, are granted to persons over 16 years of age, who are permanently incapacitated for any work by reason of accident or invalidity. The amount of pension is diminished in accordance with the income of the applicant, also by contributions of relatives. Applicants must have resided for five years, and have become incapacitated, in the State. Invalidity or accident pensions are not payable to inmates of charitable institutions, or old-age pensioners. The Act is administered in conjunction with the Old-age Pensions Act.

On 30th June, 1908, certificates had been issued to 1,906 persons, £12,527 had been paid in pension instalments, and there were 1,765 certificates current, involving an annual liability of £45,247.

#### SICKNESS AND INFIRMITY.

The statistics of the Friendly Societies of New South Wales furnish valuable information bearing upon the duration of sickness of members, but the only information available which shows particulars of the whole population is that obtained at the Census. The difficulty, however, is to define what constitutes sickness. For the purposes of the Census, it was taken to express inability for the time-being to follow one's usual occupation in life, from whatsoever cause

arising; and only those actually unable to work were counted as sick, or as suffering from an accident, as the case might be; in the case of those having no occupation, bedfast sickness was understood.

Assuming the results of 1901 to be indicative of the general condition of the population, it would appear that rather more than 1 per cent. of the people constantly suffer from some form of disablement arising from sickness or the result of an accident. The following statement shows the number and proportion per 1,000 of each sex suffering from each cause :—

Cause of Disablement.	Number.			Proportion per 1,000 living.		
	Males.	Females.	Total.	Males.	Females.	Total.
Sickness ... ..	8,389	5,129	13,518	11·81	7·95	9·98
Accident ... ..	2,127	443	2,570	3·00	0·69	1·89
Total ... ..	10,516	5,572	16,088	14·81	8·64	11·87

The sickness rate for males is half as high again as that for females, while the accident rate is four and a half times as high, the disparity between the sexes being chiefly due to the greater risks to which males are exposed. Of the total number disabled, nearly 15 per cent., namely 1,423 males and 1,018 females were being treated in hospitals. The following table shows the number in various age groups suffering from sickness and accident, and the proportion per 1,000 living in each group of both together :—

Age Group.	Sickness.		Accident.		Proportion per 1,000 living in each group of both together.	
	Males.	Females.	Males.	Females.	Males.	Females.
Under 10 ... ..	305	322	63	38	2·23	2·24
10—19 ... ..	640	589	283	58	6·07	4·29
20—39 ... ..	1,676	1,472	646	97	10·38	7·50
40—64 .. ...	2,761	1,395	793	134	25·34	14·66
65—79 ... ..	2,405	1,019	322	88	111·97	64·05
80 and over ... ..	590	322	19	27	226·98	150·97
Not stated ... ..	12	10	1	1	.....	.....
Total, All Ages ..	8,389	5,129	2,127	443	14·81	8·64

With one exception—the age group under 10—the males show higher rates than the females, the differences becoming greater as the ages increase. In each sex the rates increase from the lowest to the highest ages. From age 40 the rates increase very rapidly, until at age 80, one-fifth of the males and one-seventh of the females are laid up.

Although the Census experience would not be utilised by an actuary in establishing rates for sick pay in a friendly society, it is important as showing the probable loss among the whole population. Assuming, therefore, that the rate of sickness existing on the Census day will prevail throughout the

whole year, it is calculated that between the working ages—20 and 65—a man will probably be sick 5·89 days per year.

The sickness experience of the Friendly Societies of New South Wales is contained in the first Valuation Report, covering the quinquennial period 1900–04. The sickness rates experienced during the period 1900–04 by the male members of all the Friendly Societies combined, in New South Wales, are given in the following table:—

Central Age.	Rate of Sickness per member per annum.	Central Age.	Rate of Sickness per member per annum.
	weeks.		weeks.
18	·87	53	1·82
23	·77	58	2·98
28	·70	63	4·44
33	·76	68	6·19
38	·87	73	9·07
43	1·07	78	11·08
48	1·34		

During the quinquennium there were 367,749 males, aged 16–80 years, exposed to sickness for one year each, and the average amount of sickness experienced by each member was 1·23 weeks per annum.

The female experience was too small—comprising only 4,058 years of exposure—for any results of practical value to be derived. The rates indicated were, however, rather heavy, especially at the young ages.

The male rates shown in the above table decrease down to age 28, and then increase regularly to the end of the period of life observed. The phenomenon of high rates at the early ages is rather surprising. It is not accounted for by paucity of data, for the same result was exhibited in the experience of individual societies; and the sickness rates of the Friendly Societies of other States of the Commonwealth disclose a similar feature. It must be concluded, therefore, that it is peculiar to this class of experience, and is probably due to malingering by young members incited by the liberal benefits allowed. Many of the societies have recognised this and acting on the advice tendered in the Valuation Report, have reduced the amount of sickness benefits to members under the age of 20 years.

The sickness experience of the societies for the last three years is not yet available for individual ages, but the aggregate experience of members of all ages is shown below:—

Year.	Members exposed to risk of Sickness.	Sick Members.		Period of Sickness.	
		Total.	Proportion to total exposed to risk.	Total.	Per member exposed to risk.
				weeks.	weeks.
1905	84,355	18,348	21·8	104,289	1·24
1906	87,943	18,633	21·2	105,310	1·20
1907	92,020	22,504	24·4	123,971	1·35

A phase of the subject also discussed in the first Valuation Report of Friendly Societies in New South Wales, is the extra risk attaching to hazardous occupations. The only well-defined class of occupations carrying a heavy risk, the experience of whose members was readily deducible, was that of the mining section of the community. The relation between the mining and non-mining rates for three of the larger societies combined is shown in the following comparison:—

Age Group	Mining rate per cent. of non-mining rate.	Age Group.	Mining rate per cent. of non-mining rate.
16-20	142	41-45	140
21-25	131	46-50	147
26-30	128	51-55	139
31-35	132	56-60	133
36-40	129	All ages	139

Viewing the effect of the sickness of mining members as a whole, it is apparent, unit for unit of membership, that a miner causes 39 per cent. more expenditure for sick pay than a non-miner.

Probably other hazardous occupations would show similar results, but the data were too scanty to admit of a more exhaustive investigation.

*Deaf and Dumb.*—The number of persons who were deaf and dumb in 1901 was 390, representing a proportion of one person in every 3,474 of the population. The proportion of deaf-mutes has decreased since 1891. It is, however, feared that the full number has not been returned, because the male rate is less than the female—the general experience elsewhere being in the contrary direction. Furthermore, if we study the table below, which gives the rates in various age groups, it will be seen that the rate at ages 10 to 15 is the highest; whereas, since deaf-mutism is an affliction of childhood, it is reasonable to expect that the rates below those ages would be the highest. This probably arises from the unwillingness of parents to make known this infirmity in their children.

Age Group.	Number.		Proportion per 1,000 living.	
	Males.	Females.	Males.	Females.
Under 5	2	3	·02	·04
5—9	25	14	·30	·17
10—14	38	36	·47	·45
15—19	21	33	·30	·47
20—44	82	87	·31	·36
45—64	20	24	·21	·34
65 and over	1	3	·04	·02
Not stated	.....	1	.....	.....
Total	189	201	·27	·31

Excluding children under 10, it will be seen that the rate declines more or less regularly as the age advances. At all ages from 15 to 65 the female rate is higher than the male.

*Blind.*—The number of persons afflicted with blindness at the Census of 1901 was 884. This is equivalent to one person in every 1,533. The higher proportion among males is probably due to the greater risk of accident to which they are exposed. Blindness comes on with approaching old age,

as will be seen below, where the numbers and proportion in various age groups are given :—

Age Group.	Number.		Proportion per 1,000 living.	
	Males.	Females.	Males.	Females.
Under 10 ... ..	15	11	·10	·07
10—19 ... ..	31	24	·20	·16
20—44 ... ..	99	70	·37	·29
45—54 ... ..	76	27	1·29	·62
55—64 ... ..	93	54	2·56	1·96
65—74 ... ..	140	75	6·74	5·19
75—84 ... ..	57	61	10·44	13·81
85 and over ... ..	23	26	28·75	38·35
Not stated ... ..	1	1	.....	.....
Total ... ..	535	349	·75	·54

Among both sexes the rate increases from the lowest to the highest ages, and rapidly after age 65. At all ages below 65 the male rate is higher than the female; after that age the female rate is higher, owing to the fact that women live longer than men. The majority of young persons afflicted with blindness were probably born so.

#### INSANITY.

The number of insane persons in New South Wales, under official cognizance in the various Government hospitals for the treatment of the insane, at the end of 1907 was 5,576, equal to 3·54 per 1,000 of the population, or corresponding to one insane person in every 282. This rate is slightly below that prevailing in England.

The hospitals for insane under the immediate control of the Government are seven in number—six for ordinary insane, and one at Parramatta for criminals. There are also licensed houses at Picton, Ryde, and St. Peters.

In the following table will be found the number of persons in hospitals for the insane at the close of each year, and the proportion per 1,000 of the population in quinquennial periods since 1876 :—

Period.	Number of Insane Persons.			Proportion per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1876-1880	5,901	3,024	8,925	3·20	1·96	2·63
1881-1885	7,409	4,548	11,957	3·12	2·34	2·77
1886-1890	8,883	5,629	14,512	3·09	2·35	2·77
1891-1895	10,520	6,654	17,174	3·23	2·37	2·83
1896-1900	12,408	8,022	20,430	3·54	2·58	3·09
1901	2,677	1,798	4,475	3·70	2·74	3·24
1902	2,816	1,857	4,673	3·80	2·79	3·32
1903	2,942	1,993	4,935	3·90	2·95	3·45
1904	3,021	2,054	5,075	3·90	2·99	3·47
1905	3,134	2,118	5,252	3·94	3·02	3·51
1906	3,271	2,226	5,497	4·01	3·12	3·59
1907	3,323	2,253	5,576	3·95	3·08	3·54

From these figures it appears that insanity is increasing in New South Wales, but it would not be safe to assert that the increase is real unless we are able to view the relative figures in age groups, since the age incidence is a variable quantity and insanity is more essentially an infliction of advancing age.

An inspection of the table given below of the insane persons both male and female, in each State at the end of 1907, and the rate per 1,000 inhabitants of each sex, will show that the rate of insanity varies greatly in the different States, and that, except in Tasmania, the rate for males is higher than that for females:—

State.	Year.	Number of Insane.			Per 1,000 of Population.		
		Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ...	1907	3,323	2,253	5,576	3·95	3·08	3·54
Victoria... ..	1907	2,548	2,413	4,961	4·09	3·88	3·98
Queensland ... ..	1907	1,273	796	2,069	4·22	3·17	3·74
South Australia ...	1906	566	428	994	2·78	2·37	2·59
Western Australia ...	1906	398	148	546	2·59	1·37	2·09
Tasmania ... ..	1906	240	242	482	2·58	2·77	2·67
Commonwealth ...	.....	8,348	6,280	14,628	3·76	3·17	3·48

There is one remarkable difference between the Australian States and England and Wales, namely, that in England the greater proportion of insanity is found amongst women, whereas in Australia it is found amongst men. In England and Wales the rate per 1,000 males in 1907 was 3·42, and per 1,000 females 3·71.

The number of admissions during the last twenty years to hospitals for the insane, and the proportion per 1,000 of the mean population, are given below:—

Year.	Admissions and Readmissions.	Proportion to population per 1,000.	Year.	Admissions and Readmissions.	Proportion to population per 1,000.
1888	587	0·57	1898	730	0·56
1889	550	0·52	1899	796	0·60
1890	611	0·55	1900	859	0·63
1891	596	0·52	1901	818	0·62
1892	666	0·57	1902	947	0·68
1893	688	0·57	1903	1,065	0·75
1894	712	0·58	1904	1,020	0·71
1895	715	0·57	1905	1,009	0·68
1896	740	0·58	1906	1,123	0·74
1897	692	0·54	1907	977	0·63

From the foregoing table it appears that the rate of admissions was lowest in 1891, when the proportion was 0·52 per 1,000 of population, and then increased gradually until 1899. From 1900 the increase has been more pronounced, till the proportion reached 0·75 in 1903, in which year there was a large number of readmissions. In the next two years the rate decreased, but in 1906 the largest number of readmissions was recorded, and the rate stood at 0·74. Prior to 1893 there was no law in force to prevent the influx of insane into the State. In that year Act 56 Vic. No. 23 came into force, section 4 rendering the owner, charterer, agent, or master of a vessel liable for the maintenance of any insane person landed in the State.

Omitting the few cases where patients absconded, the next table shows, in quinquennial periods, the total number of patients who were discharged from the hospitals, either on account of recovery, permanent or temporary, or who died, and the proportion borne by each to the average number resident during each period:—

Period.	Quinquennial Average Number Resident.	Discharged—recovered or relieved.		Died.	
		Number.	Per cent. of Average Number Resident.	Number.	Per cent. of Average Number Resident.
1883-1887	12,678	1,246	9·83	876	6·91
1887-1892	14,964	1,465	9·79	1,026	6·86
1893-1897	17,863	1,742	9·75	1,148	6·43
1898-1902	20,796	2,045	9·83	1,381	6·64
1903-1907	24,940	2,419	9·70	1,848	7·41

It, therefore, appears that the percentage of discharged patients is fairly constant, but the percentage of deaths is on the increase.

Juvenile lunatics are as a rule sent to the Hospital for the Insane at Newcastle—an asylum which is set apart for imbecile and idiotic patients.

In the following table are shown the percentages of the various causes of insanity. The calculations have been made on the apparent or assigned causes in the cases of all patients admitted and readmitted into the asylums and licensed houses for the insane during the last quinquennium. For purposes of comparison the experience of England and Wales is added:—

Cause.	Males.		Females.	
	New South Wales.	England and Wales.	New South Wales.	England and Wales.
	per cent.	per cent.	per cent.	per cent.
Domestic trouble, Adverse circumstances,				
Mental anxiety ... ..	9·72	11·12	13·28	12·58
Intemperance in drink ... ..	14·19	15·73	7·36	6·31
Hereditary influence, or Congenital defect,				
ascertained ... ..	14·38	19·14	15·28	21·39
Functional disorders ... ..	.....	.....	10·02	9·50
Previous attacks ... ..	13·26	11·27	14·09	15·60
Accident, including Sunstroke ... ..	4·87	3·83	1·22	0·67
Old age ... ..	5·95	5·48	4·07	6·21
Puberty ... ..	2·57	1·03	2·18	1·16
Epilepsy and diseases of skull and brain ... ..	5·36	} 20·38 {	3·88	} 16·28 {
Other ascertained causes ... ..	13·42		17·27	
Unknown ... ..	16·28	12·02	11·35	10·30
Total ... ..	100·00	100·00	100·00	100·00

Intemperance in drink is frequently stated to be the most fruitful cause of insanity, but from the above table hereditary influence is apparently the chief factor, both here and in England. The figures, moreover, prove that insanity arising from intemperance is not so common in this State as in the old country. Amongst females the chief causes of insanity are hereditary influence and domestic troubles. It is believed that hereditary influence and congenital defect are responsible in New South Wales for a much larger percentage of cases than the number shown in the table, and that of the unknown causes the great majority should be ascribed to hereditary influences.

The small proportion of cases set down to these two causes is simply due to the difficulty of obtaining knowledge of the family history of a large number of those who enter the asylums.

The average weekly cost of maintaining insane patients in the hospitals during the year 1907 was about 10s. 10<sup>3</sup>d. per head, of which the State paid 8s. 9d., the balance being made up by contributions from the estates of the patients themselves, or by their friends. The subjoined table shows the average weekly cost per head, and the average private contributions, from 1898 to 1907:—

Year.	Average number resident.	Cost of maintenance of Patients.	Cost per head to State.	Contribution per head from private sources.	Total weekly cost per head.
	No.	£ s. d.	s. d.	s. d.	s. d.
1898 ...	3,868	111,034	9 5	1 7 <sup>1</sup> / <sub>2</sub>	11 0 <sup>1</sup> / <sub>2</sub>
1899 ...	3,969	114,451	9 5 <sup>1</sup> / <sub>2</sub>	1 7 <sup>1</sup> / <sub>2</sub>	11 1
1900 ...	4,131	115,790	9 2	1 7 <sup>1</sup> / <sub>2</sub>	10 9 <sup>1</sup> / <sub>2</sub>
1901 ...	4,225	123,531	9 5 <sup>1</sup> / <sub>2</sub>	1 9 <sup>1</sup> / <sub>2</sub>	11 2 <sup>1</sup> / <sub>2</sub>
1902 ...	4,376	143,253	10 11 <sup>1</sup> / <sub>4</sub>	1 7 <sup>1</sup> / <sub>2</sub>	12 7
1903 ...	4,580	151,309	10 10	1 10 <sup>1</sup> / <sub>2</sub>	12 8 <sup>1</sup> / <sub>2</sub>
1904 ...	4,742	139,974	9 5 <sup>1</sup> / <sub>2</sub>	1 9 <sup>1</sup> / <sub>2</sub>	11 4 <sup>1</sup> / <sub>2</sub>
1905 ...	4,901	137,971	8 9 <sup>3</sup> / <sub>4</sub>	2 0 <sup>1</sup> / <sub>2</sub>	10 10
1906 ...	5,115	143,245	8 8 <sup>1</sup> / <sub>2</sub>	2 0 <sup>1</sup> / <sub>2</sub>	10 9 <sup>1</sup> / <sub>2</sub>
1907 ...	5,285	149,728	8 9	2 1 <sup>1</sup> / <sub>2</sub>	10 10 <sup>1</sup> / <sub>2</sub>

In the course of the last ten years the number of patients resident in the hospitals for insane has increased by 36·6 per cent.; and during the same period the increase in expenditure has been 34·8 per cent.

#### DIVORCES.

Since the passing of the existing Act of 1892, by which the grounds of divorce were greatly increased, the business of the Divorce Court has grown enormously; so that, out of a total of 5,694 petitions for divorce, 513 for judicial separation, and 58 for nullity of marriage, presented to the Court from 1873 to the end of 1907, no less than 5,036 petitions for divorce, 445 for judicial separation, and 48 for nullity of marriage, representing 88 per cent. of the total petitions, have been presented in the course of the last sixteen years. Of the 5,694 petitions for divorce, 1,556 were presented *in forma pauperis*.

The following statement shows the divorces, judicial separations, and decrees of nullity of marriage granted in New South Wales since the year 1873:—

Period.	Divorces.		Judicial Separation Granted.	Nullity of Marriage.	
	Decrees nisi.	Decrees absolute.		Decrees nisi.	Decrees absolute.
1873-1877	55	33	...	...	...
1878-1882	85	70	...	...	...
1883-1887	141	120	8	2	2
1888-1892	305	224	31	5	5
1893-1897	1,403	1,303	55	7	7
1898-1902	1,183	1,093	89	12	12
1903-1907	983	830	61	13	10
Total ...	4,155	3,678	244	39	36

Until 1873 the Supreme Court of the State had no jurisdiction in divorce. From the 1st July in that year down to the end of 1892 the number of divorce decrees made absolute was 447. In the month of August, 1892, the new Divorce Act had come into force, and in 1893 the number of decrees rose to 247, and in the following year to 288; but in 1907 the number had decreased to 124. The number of divorces per 10,000 marriages in New South Wales was 347 during the two years 1893-94, 277 during the five years 1895-99, 206 during the five years 1900-04, and 125 during the three years 1905-7. Of course, it is only fair to assume that after the new Act was passed in 1892 advantage was taken of its provisions to dissolve marriages which would have been broken long before had the grounds on which divorce is granted always been the same; and this, no doubt, accounts for the diminished number of divorces granted since 1895. Bearing this in mind, however, it must be confessed that the number of decrees absolute in 1907 was still very large.

Reckoning as a divorce only those cases where the decree has been made absolute, the total number of decrees, from 1873 to 1907, was 3,958, of which 3,678 were divorces, 36 cases of nullity of marriage, and 244 judicial separations. In the following pages, where certain particulars of divorce are given, these 3,958 cases are considered as a whole.

The total number of decrees granted at the instance of the husband was 1,205; and at the instance of the wife 2,753. The next statement gives the sex of the petitioner for each case of divorce, judicial separation, and nullity of marriage:—

	Divorce.	Judicial Separation.	Nullity of Marriage.
Husband ... ..	1,156	29	20
Wife ... ..	2,522	215	16

Of every 100 decrees granted in the State, the wife has been the petitioner in 70, and the husband in 30 cases.

In three out of every ten successful divorce petitions, relief is sought on more than one ground, and to give a statement of the grounds as they are set forth in the petitions would be to enter into useless detail. The appended table, therefore, shows only the more important grounds.

Grounds of Suit.	Divorces (Decrees <i>Nisi</i> made absolute).	Judicial Separation Granted.	Decrees of Nullity of Marriage made absolute.	Total.
Adultery ... ..	1,233	35	...	1,268
„ and cruelty, desertion ... ..	289	22	...	311
„ „ habitual drunkenness, &c. ... ..	58	4	...	62
„ „ other grounds ... ..	8	1	...	9
Bigamy and adultery, cruelty, and desertion	37	...	23	60
Cruelty ... ..	...	76	...	76
„ and desertion, habitual drunkenness, &c. ... ..	256	19	...	275
Desertion ... ..	1,591	9	...	1,600
„ and habitual drunkenness, &c. ... ..	45	...	...	45
„ „ other grounds ... ..	6	...	...	6
Habitual drunkenness and neglect to support, &c. ... ..	104	5	...	109
Imprisonment for three years and upwards	19	...	...	19
Lunacy of petitioner ... ..	...	...	1	1
Others ... ..	2	...	12	14
Repeated assaults and cruel beatings	30	...	...	30
By consent, without admissions ... ..	...	73	...	73
Total ... ..	3,678	244	36	3,958

The religious denomination, as shown in the marriage certificate, is that of the minister officiating at the marriage ceremony, and, excepting matrimonial agencies, represents the religious belief of at least one of the parties. In the following table will be found the denomination of marriages in all cases of divorce, judicial separation, and nullity of marriage :—

Denomination.	Divorces, Judicial Separations and Nullity of Marriage.	Denomination.	Divorces, Judicial Separations, and Nullity of Marriage.
Church of England ... ..	1,611	Church of Christ ... ..	10
"    "    Free ... ..	17	Unitarian ... ..	13
Roman Catholic ... ..	398	Hebrew ... ..	27
Methodist ... ..	432	Others ... ..	25
Presbyterian ... ..	560	Registrar ... ..	372
Baptist ... ..	64	Not stated ... ..	25
"    Independent ... ..	16	Matrimonial Agencies ... ..	96
Congregational ... ..	278		
Lutheran ... ..	14	Total ... ..	3,958

From this table it will be seen that of the 3,958 divorces, &c., up to the end of 1907, 1,611, or 40·7 per cent., were solemnised by the Church of England, the next in order being the Presbyterians with 560, or 14·1 per cent., followed by the Methodists, 432 (10·9 per cent.); Roman Catholics, 398 (10·1 per cent.); and Congregational, 278 (7·0 per cent.). In 372 cases, or 9·4 per cent., the ceremony had been performed at a Registrar's office, and in 96 cases (2·2 per cent.) at matrimonial agencies.

Of the 3,958 couples who were divorced or judicially separated, or whose marriage was declared null, the duration of marriage ranged from one to fifty years, as shown in the appended table :—

Duration in Years.	Divorce, Judicial Separation, and Nullity of Marriage.	Duration in Years.	Divorce, Judicial Separation, and Nullity of Marriage.
1	36	25-29	147
2	51	30-34	53
3	96	35-39	19
4	197	40-44	8
5-9	1,280	45	2
10-14	1,097	47	1
15-19	659	50	1
20-24	311		
		Total ...	3,958

It thus appears that 380 couples, or 9·6 per cent. of the total, had been married for a period of less than 5 years; 1,280, or 32·3 per cent. of the whole number, had been married for periods ranging from 5 to 10 years; 1,097, or 27·7 per cent., between 10 and 15 years; and 659, or 16·7 per cent., between 15 and 20 years. In no less than 458 cases the duration of the marriages was between 20 and 30 years; and in 84 cases the period was even greater, extending, indeed, over 40 years in the case of 12 couples. The average duration of marriage where decree absolute was obtained was 11·8 years; of judicial separations, 15·5 years; and nullity of marriage, 7·3 years; the average for the 3,958 dissolutions being 12·0 years.

A table showing the number of children to each family, and also the cases where no issue was born to the marriage, is given below :—

Number of Children.	Divorce, Judicial Separation, and Nullity of Marriage.	Number of Children.	Divorce, Judicial Separation, and Nullity of Marriage
0	1,281	10	9
1	961	11	9
2	649	12	4
3	394	13	1
4	230	14	1
5	144	15	1
6	106	Not stated ...	33
7	57		
8	42		
9	33	Total ...	3,958

In 32·5 per cent. of the cases in which the decree sought for was granted, the ties between the parties had not been strengthened by the birth of children ; for of the 3,958 successful petitions for divorce, judicial separation, or nullity of marriage, no less than 1,281 of the parties were childless, while the number may have been even larger than this, as in 33 other cases the information did not disclose particulars regarding the fruitfulness of the unions. The number of children affected by the other 2,644 decrees was 7,055.

The conjugal condition of the contracting parties to the marriages concerning which the petitions for divorce and nullity of marriage were made absolute, and judicial separations were granted, is shown in the following table :—

Conjugal Condition of Males.	Conjugal Condition of Females.				Total Males.
	Spinster.	Widow.	Divorced.	Not stated.	
Bachelor ... ..	3,322	163	14	...	3,499
Widower... ..	143	59	4	1	212
Divorced ... ..	10	4	2	...	16
Not stated ... ..	53	10	...	114	177
Total, Females ...	3,533	236	20	115	3,904

These figures are exclusive of 35 decrees made absolute on account of a previous marriage, as in 33 cases the husband was previously married and the wife in 2 cases. There were also 19 nullity suits made absolute, 8 on account of the previous existing marriage of the husband, and 11 on account of the previous existing marriage of the wife.

The ages of the parties are not of great value unless combined with the duration of marriage. The large number whose ages are not ascertained also detracts from the value of the information. The ages were unknown in 784 marriages or 19·8 per cent. of the total, and of the remaining 3,174, it may be said that the great majority related to marriages contracted between parties of suitable ages, 2,174 being between husbands of the ages from 21 to 39 years inclusive, and wives of the ages from 18 to 30 years inclusive. In 865 cases, however, the marriage had been contracted at very early ages, the husband being below 21 years in 339 cases, and the wife below 18 in 526 cases, while there were 121 cases in which the husband was less than 21 and the wife less than 18 at the time of marriage. There were only 109 cases in which the husband had been 40 or over at the time of marriage, and 122 in which the wife had been 31 or over, while unions in which the husband had been 40 or over and the wife 31 or over numbered but 48.

## HABITATIONS OF THE PEOPLE.

The housing of the people is an important indication of the social condition of a country, as the dwellings, judged by the materials of which they are built, the number of rooms in them, and the number of occupants, are an indirect measure of the well-being of the persons who inhabit them.

The following statement shows the various kinds of habitations or dwellings, the number of persons residing therein, and the proportion of each to the total at the census of 1901 :—

Dwellings.	Number.	Occupants.	Proportion per cent.		Occupants per Dwelling.
			Dwellings.	Occupants.	
Inhabited—					
Private dwellings ... ..	237,448	1,221,571	88·35	90·70	5·14
Boarding-houses ... ..	4,045	42,336	1·50	3·14	10·47
Hote's ... ..	3,093	35,544	1·15	2·64	11·49
Other households ... ..	368	6,664	·14	·50	18·11
Institutions ... ..	452	18,978	·17	1·41	41·99
Tents and camps ... ..	7,096	18,227	2·64	1·35	2·57
Total inhabited ... ..	252,502	1,343,320	93·95	99·74	5·32
Uninhabited ... ..	14,831	.....	5·52	.....	.....
Being built... ..	1,438	.....	·53	.....	.....
Migratory population ... ..	.....	3,500	.....	·26	.....
Total ... ..	268,771	1,346,820	100·00	100·00	.....

Private dwellings sheltered 90·7 per cent., boarding-houses 3·1 per cent., and hotels 2·6 per cent. of the people. Hotels numbered 3,093, or a proportion of 1 to every 440 of the population.

The dwellings, including inhabited, uninhabited, and those being built, classified according to the materials of which they were constructed, were as follows in 1901 :—

Material of which built.	Number.	Proportion per cent.
Stone ... ..	10,793	4·02
Brick ... ..	92,879	34·56
Concrète, adobe, pisé ... ..	1,525	0·57
Iron ... ..	5,380	2·00
Wood, slabs ... ..	140,482	52·27
Lath and plaster, mud, bark ... ..	4,952	1·84
Canvas, calico ... ..	8,874	3·30
Indefinite, unspecified ... ..	3,886	1·44
Total ... ..	268,771	100·00

The principal materials used for building are wood and bricks, more than half the dwellings being built of the former material, and over one-third of the latter; 4 per cent. are built of stone, and 2 per cent. of iron. The dwellings constructed of canvas and calico are almost entirely tents.

The next table shows the number of houses of various sizes, and the population living therein :—

Number of Rooms in House.	Number of Houses.	Occupants.	Proportion per cent.		Persons to a House.
			Houses.	Occupants.	
1	6,755	10,209	2.78	.79	1.51
2	14,079	41,160	5.80	3.18	2.92
3	23,340	92,865	9.61	7.17	3.98
4	50,858	241,683	20.95	18.65	4.75
5	55,294	292,060	22.77	22.54	5.28
6	40,246	236,280	16.57	18.23	5.87
7 to 10	42,825	283,975	17.64	21.92	6.63
11 to 15	6,764	57,246	2.79	4.42	8.46
16 to 20	1,533	17,579	0.63	1.36	11.47
Over 20	1,123	22,633	.46	1.74	20.15
Total not stated	2,137	10,425	.....	.....	.....
Total ...	244,954	1,306,115	100.00	100.00	5.33

It will be seen that 57 per cent. of the houses contained from 5 to 10 rooms, and that nearly two-thirds of the population were living in them, the average number of occupants per room being under one; while slightly over 30 per cent. of the houses contained 3 and 4 rooms, and were occupied by a little more than one-fourth of the population.

#### DOMESTIC SERVANTS.

The following statement shows the number of domestic servants who were employed in the various classes of households at the Census of 1901 :—

Class of Household.	Total Households.		Households employing domestic servants.	
	Number.	Occupants.	Number.	Number of servants.
Private families ...	237,448	1,221,571	21,885	28,703
Boarding-houses ...	4,045	42,336	1,010	1,696
Hotels ...	3,093	35,544	2,455	6,043
Other households ...	822	25,652	361	942
Total...	245,408	1,325,103	25,711	37,384

It is to be understood that only those domestic servants are included above who were known to be sleeping at their place of work. There were in addition, 2,902 sleeping away from their place of work on the night of the Census.

The principal feature of the above table is the number of servants employed in private families, and it will perhaps be sufficient if these only are considered, as in boarding-houses and hotels servants are more or less necessary for the proper conduct of the business. At 3,035 boarding-houses and 638 hotels apparently no servants were employed.

It will be found that in private families 2.4 per cent., in boarding-houses 4.0 per cent., and in hotels 1.7 per cent. of the total occupants were servants.

The next table distributes the servants in private families according to the number employed, and to the size of the house where they were employed :—

Number of Rooms in House.	Total House- holds.	Households employing specified number of Servants.					Total House- holds employing Servants.	Total Servants employed.
		0	1	2	3	4 and over.		
1 and 2 ...	20,823	20,760	61	2	.....	.....	63	65
3 and 4 ...	73,990	72,167	1,775	47	1	.....	1,823	1,872
5 and 6 ...	94,343	88,072	5,955	280	28	8	6,271	6,634
7 to 10 ...	40,651	30,461	8,140	1,644	357	49	10,190	12,706
11 to 15 ...	4,763	1,936	1,216	893	462	206	2,777	5,301
16 to 20 ..	637	154	111	129	115	128	483	1,334
Over 20 ...	195	33	22	30	33	77	162	619
Not stated ...	2,046	1,930	82	19	9	6	116	172
Total ...	237,448	215,563	17,362	3,044	1,035	474	21,885	28,703

As the houses increase in size the proportion employing servants increases, and the proportion of servants themselves increases. By far the greater number of households employ only one servant. Altogether, 9·2 per cent. of the private families employ a servant; in the Metropolis the proportion is 11·3 per cent., and in the remainder of the State 8 per cent. The number of servants employed averaged 12·1 to every 100 families in New South Wales, 14·9 to every 100 in the Metropolis, and 10·5 to every 100 in the country.

## LAW AND CRIME.

### HIGH COURT OF AUSTRALIA.

The High Court Procedure Act of 1903 provides that appeals to the High Court from judgments of the Supreme Court or of any other Court of any State, from which, at the establishment of the Commonwealth, an appeal lay to the Queen-in-Council, shall be instituted by notice of appeal in a certain prescribed form. The appellant may appeal from the whole or any part of a judgment, but his notice of appeal must give full particulars in this regard. Since the establishment of the Court 118 appeals have been set down for hearing and 62 have been allowed.

### THE SUPREME COURT—CIVIL JURISDICTION.

The chief legal tribunal of the State is the Supreme Court, which at present consists of a Chief Justice and six Puisne Judges. Civil actions are usually tried by a jury of four persons, but either party to the suit, on cause shown, may apply to a Judge in Chambers to have the cause tried by a jury of twelve. Twice the number of jurors required to sit on the case are chosen by lot, from a panel summoned by the Sheriff, and from that number each of the parties strike out a fourth, the remainder thus selected by both parties forming the jury who are to try the case. The jury are constituted the judges of the facts of the case only, being bound to accept the dicta of the Judge on all points of law. From the Court thus constituted an appeal lies to what is called the "Full Court," sitting *in Banco*, which is generally composed of at least three of the Judges. The Chief Justice, or in his absence the senior Puisne Judge, presides over the Full Court, which gives its decision by majority. New trials may be granted where the Judge has erroneously admitted or rejected material evidence; where he has wrongly directed the jury on a point of law; where the verdict of the jury is clearly against evidence; or where, from some other cause, there has evidently been a miscarriage of justice.

Provision is made for appeals to the Privy Council, but any suitor wishing to carry his cause before that supreme tribunal of the Empire must first obtain leave so to do from the Supreme Court. The amount in dispute must be at least £500, or affect the construction of a New South Wales statute. In other cases, application for leave to appeal must be made to the Privy Council itself. The British Government has appointed Chief Justice Way, of South Australia, to a seat on the Judicial Committee of the Privy Council, so that he may bring to the deliberations of the Committee his knowledge of the laws, especially the land laws, of the States. So far as New South Wales is concerned, during the five years ended 1907, 16 applications for leave to appeal to the Privy Council in common law were granted, 8 in Equity, and 1 in Bankruptcy. Leave was granted in 3 cases in common law, and 2 in Equity, during 1907.

The Chief Justice has also an extensive jurisdiction as Commissary of the Vice-Admiralty Court, in which all cases arising out of collisions, &c., in Australian waters, are determined. One of the Puisne Judges acts as his deputy; but the Supreme Court, as such, has no jurisdiction in Admiralty cases.

One of the Puisne Judges also acts as Chief Judge of the Equity Court, from whose decrees an appeal lies to the Full Court, and thence to the Privy Council.

Affairs in Bankruptcy are also conducted by a Puisne Judge, assisted by the Registrar. An appeal may be made to the Full Court against the Judge's decision.

Another Puisne Judge presides over the Divorce Court, in which cases are usually tried without a jury, an appeal lying to the Supreme Court.

The Equity Judge formerly represented the ecclesiastical jurisdiction of the Supreme Court in connection with applications for the probate of wills and for letters of administration, and determined suits as to the validity, &c., of wills. By the probate Act of 1890 this jurisdiction was vested in the Supreme Court, in its Probate jurisdiction, and the business transferred to such Judge as might be appointed Probate Judge. Motions for rehearing cases, adjudicated in this Court, are sometimes made before the Supreme Court or Privy Council.

A Judge can be removed from office only upon the address of both Houses of Legislature. Upon permanent disability or infirmity, or after fifteen years' service, a Judge is entitled to retire from the Bench with a pension, the amount of which, as well as of his salary, is regulated by various Acts.

To render a person eligible for admission as a solicitor, provided he has not been admitted in England, Ireland, or Scotland, or in any State of the Commonwealth of Australia, he must have been articled to some solicitor practising in New South Wales, and have served for a term of five years, or in the case of a person who has taken a degree in Arts before entering into articles, a term of three years, and must have passed the examinations of a Board, consisting of two barristers and four solicitors, appointed annually for that purpose by the Judges of the Supreme Court. The admission of a solicitor can take place only on the last day of any of the four terms into which the year is divided. A solicitor who ceases to practice for two years continuously is allowed to resume practice only under an order from the Court. A barrister who has been in practice as such for five years, having caused himself to be disbarred, may be admitted as a solicitor without examination. A solicitor is competent to appear, and has the right of audience, in all Courts of New South Wales. The Supreme Court may suspend or remove from the roll of solicitors any person who, in their opinion, has been guilty of misconduct or malpractice.

The Board for admission of barristers of the Supreme Court consists of the Judges of the Supreme Court, the Attorney-General, and two elected members of the Bar. Applicants must have been students-at-law for three, or, in the case of graduates, for two years, and have passed all examinations prescribed by the Board. A solicitor who has been in practice for at least five years, and who has removed his name from the roll of solicitors, is entitled to be admitted as a barrister without examination.

During the year 1907 there were 175 persons practising as barristers of the Supreme Court, and the solicitors numbered 969, of whom 571 were in Sydney, and 398 in the country.

#### COMMON LAW JURISDICTION OF SUPREME COURT.

The following table gives the number of writs issued and the amount for which judgment was signed in the Supreme and Circuit Courts (Common Law jurisdiction) during the last ten years. The number of writs issued includes cases which were subsequently settled by the parties; but the total amount involved in these claims is not, of course, included

in the sum for which judgment was signed. The amounts for judgments signed include taxed costs in all cases where the judgments have been completed at the end of the year. During 1907 the total bills of costs amounted to £32,717, but from this a sum of £10,134 was taxed off, leaving the net costs at £22,583. The Court costs of taxation amounted to £438:—

Year.	Writs issued.	Judgments signed.	Year.	Writs issued.	Judgments signed.
	No.	£		No.	£
1898	2,901	302,569	1903	4,030	235,801
1899	3,014	309,085	1904	3,973	220,305
1900	2,983	296,841	1905	3,719	176,930
1901	2,890	309,346	1906	2,404	143,386
1902	3,533	475,161	1907	1,832	132,839

The number of causes set down and tried is shown below:—

Year.	Causes set down.	Not proceeded with.	Referred to Arbitration.	Causes Tried.				Total.
				Verdict for Plaintiff.	Verdict for Defendant.	Disagreement of Jury.	Non-suited.	
	No.	No.	No.	No.	No.	No.	No.	No.
1898	296	110	4	125	34	5	13	182
1899	302	83	3	154	32	5	25	216
1900	252	89	1	117	29	3	13	162
1901	280	117	1	116	28	1	17	162
1902	264	86	...	114	40	6	18	178
1903	300	102	4	131	39	3	21	194
1904	266	87	7	119	38	3	12	172
1905	260	89	2	102	49	5	13	169
1906	235	76	2	105	34	5	13	157
1907	174	62	4	89	19	1	8	108

The Commercial Causes Act, 1903, has provided a more expeditious method for the trial of commercial causes. Under this statute either party to a Supreme Court common-law action may apply to have such action placed on the list of commercial causes. The Judge decides whether the action is to be so entered, and from his order there is no appeal.

#### EQUITY JURISDICTION.

The Equity Act, 1901, consolidated enactments relating to the practice, procedure, and powers of the Supreme Court in its equity jurisdiction. The transactions of the Equity Court during the last ten years were as follow:—

Year.	Statements of Claims.	Statements of Defence.	Petitions.	Summonses.	Motions.	Decrees and Orders.
	No.	No.	No.	No.	No.	No.
1898	204	145	100	132	145	803
1899	268	154	59	116	243	822
1900	213	131	69	197	206	841
1901	131	87	58	167	159	668
1902	176	86	136	149	140	797
1903	163	91	117	175	135	806
1904	211	98	89	176	174	1,245
1905	180	88	60	192	164	1,050
1906	149	86	64	183	127	1,030
1907	172	88	71	195	147	1,072

## PROBATE JURISDICTION.

The number of probates and letters of administration granted by the Supreme Court in its testamentary jurisdiction is shown in the following table for the last ten years :—

Year.	Probates granted.		Letters of Administration.		Total.	
	Number of Estates.	Value of Estates.	Number of Estates.	Value of Estates.	No. of Estates.	Value of Estates.
		£		£		£
1898	1,391	5,132,179	840	793,187	2,231	5,925,366
1899	1,560	3,855,995	945	1,207,557	2,505	5,063,552
1900	1,505	3,916,020	947	815,012	2,452	4,731,032
1901	1,676	6,240,296	981	793,163	2,657	7,033,459
1902	1,729	5,183,341	1,053	619,279	2,782	5,807,620
1903	1,787	6,345,098	980	834,784	2,767	7,179,882
1904	1,854	5,536,494	996	619,469	2,850	6,155,963
1905	1,842	6,999,863	962	714,553	2,804	7,714,416
1906	1,927	6,697,600	925	831,837	2,852	7,529,437
1907	2,045	6,835,381	1,039	728,118	3,084	7,563,499

The figures here shown, and those dealt with in the chapter on Private Finance, as given by the Stamp Duties Department, do not agree. The Court gives the gross values of estates, inclusive of such estates as are found not to be subject to duty, while the Stamp Duties Department returns the net values of the estates, and excludes those not subject to duty. The returns shown above are also swollen to some extent by probates taken out a second time.

## INTESTATE ESTATES.

An officer is appointed under the Wills, Probate, and Administration Act, 1898, as Curator of Intestate Estates. Moneys not claimed within six years are paid into the Consolidated Revenue Fund, and used for the public service of the State. A rightful claimant may afterwards, however, obtain payment thereof, but without interest, from the date of payment into the Treasury.

The number of estates opened during 1907 was 595, from which the Curator received £35,593, and paid away £11,619; while in connection with estates opened during previous years £22,740 was received, and £37,195 paid away. Commission and fees to the amount of £3,004 were paid into the Consolidated Revenue during the year. The revenue also benefited to the extent of £9,579 of unclaimed moneys, and on the other hand claims amounting to £5,041 were received for moneys which had been paid into the Consolidated Revenue.

## BANKRUPTCY JURISDICTION.

The Bankruptcy law is administered by a Judge in Bankruptcy; certain of the powers vested in the Judge are, however, relegated to the Registrar in Bankruptcy. In the country districts many Police Magistrates and Registrars of District Courts are appointed as District Registrars, and have the same powers and jurisdiction as the Registrar in respect to the examination of bankrupts, the issue of summonses, &c. Appeals from decisions of the Registrar or of a District Registrar are made to the Judge in Bankruptcy, who also deals with questions relating to priority of claims. When any person becomes unable to pay his debts he may sequester his estate for the benefit of his creditors, or the latter may, under certain specified conditions, apply for a compulsory sequestration.

An officer of the Court, termed an official assignee, is deputed by the Judge to manage the sequestrated estate. He receives  $2\frac{1}{2}$  per cent. commission on the amount realised, and  $2\frac{1}{2}$  per cent. on the amount of dividends declared. In some cases the Court may also award him special remuneration. Creditors have the power to accept, and the Court to approve, proposals for a composition, or for a scheme of arrangement, provided that it has been approved by a majority representing three-fourths of the value of all approved claims. If such a proposal has been accepted, one or two trustees may be appointed in place of, or in addition to, the official assignee. After the acceptance and approval of a composition or a scheme or arrangement, a bankrupt may have his estate released from sequestration. He is also entitled to a release when all the creditors have been paid in full, or when they have given him a legal quittance of the debts due to them. In other cases, a bankrupt may give notice, by advertisement, three months from the date of sequestration, of his intention to apply for a certificate of discharge. The Court receives a report from the official assignee, and may either grant or refuse an absolute order of discharge, or suspend the operation of the order for a certain time, or grant an order subject to conditions respecting the future earnings or income of the bankrupt.

#### DIVORCE AND MATRIMONIAL CAUSES JURISDICTION.

Prior to the passing of the Matrimonial Causes Act of 1873, the Supreme Court of New South Wales had no jurisdiction in divorce. Under that Act the chief grounds for divorce were adultery since marriage on the part of the wife, and adultery and cruelty on the part of the husband. The present Act was passed in 1892, and during 1893 there was an amending Act passed. Under these Acts petitions for divorce can be granted for the following causes, in addition to those already mentioned:—

*Husband v. Wife.*—Desertion, or habitual drunkenness and neglect of domestic duties, for three years; refusal to obey an order for restitution of conjugal rights; imprisonment for three years and upwards; attempt to murder or inflict grievous bodily harm, or repeated assaults and cruel beatings during one year preceding the date of the filing of the petition.

*Wife v. Husband.*—Adultery and desertion for two years; desertion, or habitual drunkenness, with neglect to support and cruelty, for three years; refusal to obey an order for restitution of conjugal rights; imprisonment for three years and upwards; imprisonment under sentences aggregating three years, within a quinquennial period; attempt to murder, or to inflict grievous bodily harm, or repeated assaults and cruel beatings within one year of petition. In order to obtain relief on any of these grounds, the petitioner must have been domiciled in the State for three years and upwards at the time of instituting the suit.

In addition to the principal causes for which a divorce may be obtained, judicial separation may be granted for desertion without cause extending over two years. Nullity may be pronounced in cases of marriages which are void, or where one of the parties is incapable of performing the duties of marriage, also where certain statutory requirements have not been observed.

The law provides for suits for the restitution of conjugal rights. Before such a suit can be brought, there must have been a request of a conciliatory character to the other party to return to cohabitation.

The number of divorces granted and other particulars will be found in the chapter "Social Condition."

## DISTRICT COURTS.

District Courts have been established for the trial of civil causes where the property involved or the amount claimed does not exceed £400, and in cases where a title to land is in question, and the value of the land does not exceed £200. The Judges of these Courts also perform the duties of Chairmen of Quarter Sessions, in which capacity they try all prisoners, except such as are charged with capital crimes. District Courts are held during ten months of the year in the metropolis, and twice a year in all important country towns. The Judge is not ordinarily assisted by a jury, but in cases where the amount in dispute exceeds £20, either of the parties may, by giving notice to the Registrar of the Court, have a jury consisting of four or twelve men summoned. On questions of law, and in respect to the admission or rejection of evidence, an appeal lies to the Supreme Court.

The particulars of suits brought in the District Courts of the State during the last ten years are given in the following table:—

*Year.	Total causes commenced.	Causes tried.		Causes discontinued.	Judgment for Plaintiff by default, or confession or agreement.	Causes referred to Arbitration.	Causes pending and in arrear.	Total amount of Claims.	Court Costs of Suits.
		Verdict for Plaintiff.	Verdict for Defendant (including non-suits).						
	No.	No.	No.	No.	No.	No.	No.	£	£
1898	5,488	2,690	315		1,455	4	1,024	148,886	11,430
1899	4,949	2,339	307		1,553	3	747	135,161	10,862
1900	4,432	2,072	249		1,324	3	784	122,211	10,743
1901	4,265	1,577	217		1,743	2	726	113,392	9,020
1902	4,904	1,161	266		2,554	2	921	126,788	11,278
1903	4,673	1,064	213		2,541	2	853	121,989	9,354
1904	4,042	833	198	1,201	1,014	1	795	103,007	8,944
1905	3,687	763	186	995	999	2	742	100,862	9,227
1906	3,277	489	191	1,014	972	2	609	123,510	8,708
1907	2,971	388	156	852	903	2	670	134,991	9,470

\* Prior to 1906, year ended on 1st March.

Of the 544 causes heard during 1907, only 61 were tried by jury. During the same period there were 11 appeals from judgments given in District Courts, of which 3 were affirmed. There were also 7 motions for new trials. The amount of judgment for the plaintiff during the year was £38,774.

## MAGISTRATES' COURTS.—SMALL DEBTS CASES.

The jurisdiction of Magistrates' Courts since the Small Debts Recovery (Amending) Act, 1905, came into force on the 28th September of that year, is extended to include any action for the recovery of any debt or liquidated demand not exceeding £50, whether on balance of account or after admitted set-off or otherwise. The total number of small debts cases brought before Magistrates' Courts during 1907 was 26,548. Of these cases there were 17,752 in which the amount involved was under £5, 5,545 in which it was between £5 and £10, and 3,251 in which it was over £10.

## LICENSING COURTS.

In the metropolitan district of the State, the Licensing Court for the sale of intoxicants consists of the Stipendiary Magistrates, with the addition of Justices of the Peace specially appointed for the purpose, bringing the number of occupants of the Bench up to seven, three of whom form a quorum. In the country districts the local Police Magistrate and two Justices of the Peace, also specially appointed, constitute the Court. There has been an absolute decrease in the number of licensed public-houses in the metropolitan district since 1881, attributable to the operations of the Licensing Act, which came into force that year. In the succeeding year the number of licensed houses in the metropolitan area was 940, and in the country districts 2,123. For 1907 the numbers are 711 and 2,311 respectively—a decrease equal to 24·4 per cent. in the metropolis, and an increase in the country districts of 8·9 per cent. The Liquor Amendment Act of 1905, which is to be construed with the Liquor Act of 1898, undoubtedly goes far towards remedying several abuses in connection with the sale of intoxicating liquor, while it also makes better provision for the exercise of the principle of local option.

Under this law, in addition to stringent regulations regarding the licensing and management of hotels, the registration of clubs in which liquor is sold has been made compulsory. Registration is granted only to properly-conducted associations, established for a lawful purpose, on suitable premises. The Act also provides for the local option vote at each general election of the State Parliament. The publicans' or wine licenses in any electorate must not exceed the number existent at the commencement of the Act, except where an increase is granted on account of growth of population. The clubs must not exceed the number formed before November, 1905, and registered before March, 1906.

The resolutions submitted to the electors are—

- (a) That the number of existing licenses be continued;
- (b) That the number of existing licenses be reduced;
- (c) That no licenses be granted in the electorate;  
and where resolution (c) has been previously carried—
- (d) That licenses be restored.

In order to carry resolution (c) or (d) the votes in favour of such resolution must be three-fifths of the total votes given and must represent 30 per cent. of the electors on the roll. Where resolution (c) is not carried the votes are added to those given for resolution (b).

In electorates where the majority voted for reduction the licenses may be reduced by one-fourth. Where the "no license" resolution is carried all licenses in the electorate must cease within three years, except in special cases in which the period may be extended.

At the election in 1907 it was decided in 65 electorates to reduce the number of licenses, and in 25 electorates the majority of voters favoured continuance of the existing number. The resolution that no licenses be granted was not carried in any electorate. The votes given for continuance numbered 209,384; for reduction 75,706; and for no license 178,580.

Special Courts were constituted to effect the reductions in accordance with the Act. The time at which the reduced licenses will cease varies from six months, where the licensee has been convicted for breaches of the Liquor Acts, to three years, in cases of well-conducted houses. The latter period may be extended under certain conditions.

The following table gives particulars respecting the number of public-houses, and the average number of residents to each :—

Year.	Licensing Districts.			Average number of Residents to each House.
	Metropolitan.	Country.	Total.	
1898	789	2,364	3,153	416
1899	792	2,349	3,141	425
1900	792	2,371	3,163	428
1901	790	2,361	3,151	434
1902	787	2,345	3,132	445
1903	783	2,345	3,128	454
1904	778	2,320	3,098	467
1905	744	2,319	3,063	483
1906	723	2,332	3,055	496
1907	711	2,311	3,022	514

The number of wine licenses current during 1907 was 622, of which 300 were in the metropolitan district and 322 in the country.

There were 78 club licenses issued during 1907—43 in the metropolitan, and 35 in the country licensing districts.

#### PATENTS.—COPYRIGHT.—TRADE MARK CERTIFICATES.

The administration of the Patents, Copyright, and Trade Marks Acts has been transferred to the Federal authorities since 1st June, 1904. A patent granted under the Commonwealth Act is afforded protection in all the States, and the period for which it remains in force is limited to fourteen years. The copyright in a book, the performing right in a dramatic or musical work, and the lecturing right in a lecture, continues for forty-two years, or for the author's life and seven years, whichever period is the longer.

The registration of a trade-mark protects it for fourteen years, and may be renewed from time to time. Under the Commonwealth Designs Act an industrial design may be protected for five years, provided it is used in Australia within two years of registration.

Under the various Federal Acts, arrangements may be made for the protection in other countries of patents, copyrights, trade-marks, and designs.

#### CRIMINAL STATISTICS.

Prior to the year 1891 the criminal statistics of New South Wales were compiled from the police returns, but it was found that the latter represented the total transactions of the various stations rather than the actual number of offenders. These returns were therefore discarded, and methods of tabulation adopted from the Petty Sessions records, which have ensured a more accurate statement of facts. Except where otherwise stated, the figures in the succeeding tables refer to persons only.

## MAGISTRATES' COURTS.

In the Sydney, Parramatta, Newcastle, and Broken Hill districts, the Courts of Petty Sessions are held by Stipendiary Magistrates, and in the country districts by Police Magistrates and Justices of the Peace, the latter of whom are honorary officers. All persons entered in the charge-books of the police, except such as have been committed by a Supreme Court Judge or by a Coroner, must be brought up at the Petty Sessions, either to be dealt with summarily or to be committed to a higher tribunal. The jurisdiction of magistrates is limited generally to offences involving a sentence of six months' imprisonment, but under a few Acts—sentences up to two years' imprisonment may be imposed. A magistrate is not empowered to pass cumulative sentences, but while a person is undergoing a term of imprisonment for the committal of one offence, he may be brought up in a lower court to answer to another charge, and may be sentenced to another term, to take effect from the expiry of the first offence.

Exclusive of those charged as being of unsound mind, the persons brought before magistrates during the year 1907 numbered 67,183, of whom 2,458 were charged at children's courts. This gives a proportion of 43·21 per 1,000 of population, as compared with 43·24 in the year 1903. Below will be found a table showing in what manner the accused persons were brought up to answer the charges preferred against them, and the results. Where several offences were charged against a person on the one appearance, account is taken only of the most important :—

Procedure.	Persons charged before Magistrates.	Summarily treated.			Committed to higher Court.
		Convicted.	Discharged.	Total.	
By arrest... ..	41,842	38,052	2,753	40,805	1,037
By summons ... ..	25,341	20,051	5,197	25,248	93
Total ... ..	67,183	58,103	7,950	66,053	1,130

Thus of the 67,183 persons charged before magistrates during the year, only 1,130 were committed to higher courts, and no less than 66,053 were summarily dealt with—convictions being recorded in 58,103 cases, while 7,950 persons were discharged after evidence had been taken, or charges withdrawn. Appended is a division of the accused persons according to sex, from which it may be gathered that while females contributed 9,614 to the ranks of the offenders, only 1·03 per cent. of their number were committed to a higher tribunal, as compared with 1·79 per cent. of the males. Of the females committed, 52·5 per cent. were charged with offences against property.

Sex.	Charged before Magistrates.	Summarily treated.			Committed.
		Convicted.	Discharged, etc.	Total.	
Males ... ..	57,569	49,894	6,644	56,538	1,031
Females ... ..	9,614	8,209	1,306	9,515	99
Total, Persons ... ..	67,183	58,103	7,950	66,053	1,130

The preceding table, reduced to a population basis, will be found below:—

Sex.	Per 1,000 of Population.				
	Charged before Magistrates.	Summarily treated.			Committed.
		Convicted.	Discharged, etc.	Total.	
Males ... ..	69·30	60·06	8·00	69·06	1·24
Females ... ..	13·28	11·34	1·80	13·14	0·14
Persons ... ..	43·21	37·37	5·11	42·48	0·73

Comparing the male and female offenders with the population, it appears that 69·30 per 1,000 males and 13·28 per 1,000 females were charged with offences against the law. The summary convictions give the proportions of 60·06 per 1,000 males and 11·34 per 1,000 females. In the case of committals, however, the females emerge from the comparison on terms not quite so favourable, the proportions per 1,000 being 1·24 males and 0·14 females.

Since the appointment of Stipendiary Magistrates in the metropolitan district, there has been a greater proportion of cases summarily dealt with, and it is also noticeable that the proportion of acquittals and discharges has greatly fallen off. Prior to 1880 it may be said that about 25 per cent. of the persons brought before magistrates were discharged, while in no year shown since 1885 was the proportion more than 16·6 per cent. until 1895, when the figures reached 20·2. Since that year the percentage has again declined, falling as low as 11·8 in 1907. The following table shows the proportion of summary convictions by magistrates, of acquittals and discharges, and the committals to higher courts:—

Year.	Summary Convictions.	Acquittals and Discharges.	Committals to Higher Courts.
	per cent.	per cent.	per cent.
1870	69·0	24·7	6·3
1880	76·9	18·4	4·7
1890	80·4	16·0	3·6
1900	83·1	14·9	2·0
1901	83·4	14·4	2·2
1902	84·1	13·8	2·1
1903	83·7	14·0	2·3
1904	83·7	13·7	2·6
1905	84·5	13·1	2·4
1906	81·1	13·9	2·0
1907	86·5	11·8	1·7

An investigation into the nature of the offences, of which the 58,103 persons summarily convicted in 1907 were accused, shows that there were 1,587 persons convicted of offences against the person, 3,209 of offences against property, and 53,307 of other offences, the great majority of which were of a minor character, consisting chiefly of drunkenness and other offences against good order—such as disorderly conduct and using bad language—and of vagrancy and breaches of various Acts. It is evident, therefore, that the somewhat large number of offenders summarily convicted is made up principally of persons who cannot be included justly among the criminal classes, the total number of offenders

against the person and against property, being 4,796 out of a total of 58,103. Appended will be found a classification of the offenders summarily convicted, together with the proportions per 1,000 of population during each of the last five years :—

Year.	Against the Person.	Against Property.	Other Offences.	Total.
NUMBER OF SUMMARY CONVICTIONS.				
1903	1,516	3,759	46,104	51,379
1904	1,432	3,311	45,359	50,102
1905	1,374	3,266	46,998	51,638
1906	1,500	3,469	49,840	54,809
1907	1,587	3,209	53,307	58,103
PER 1,000 OF POPULATION.				
1903	1·07	2·65	32·47	36·19
1904	0·99	2·29	31·36	34·64
1905	0·93	2·21	31·78	34·92
1906	0·99	2·29	32·91	36·19
1907	1·02	2·06	34·29	37·37

The above figures show that there has been a considerable decrease in rate of offences against property, the figures falling from 2·65 per 1,000 in 1903 to 2·06 in 1907, or by 22 per cent. The rate of offences against the person also shows a decline.

The following table gives a classification of summary convictions of males and females during 1907. The offences of which the females were found guilty were less serious than those committed by the males. As the table shows, the number of offences against the person and against property was 5·12 per 1,000 males and 0·74 per 1,000 females:—

Offences.	Summary Convictions.			Per 1,000 of Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Against the person	1,439	148	1,587	1·73	0·20	1·02
Against property	2,818	391	3,209	3·39	0·54	2·07
Against good order	33,560	6,962	40,522	40·40	9·62	26·06
Not included in the preceding...	12,077	708	12,785	14·54	0·98	8·22
Total	49,894	8,209	58,103	60·06	11·34	37·37

The following table gives the total number of summary convictions of males and females, with the proportion per 1,000 of the population, for each year of the last quinquennial period:—

Year.	Summary Convictions.			Per 1,000 of the Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1903	43,082	8,297	51,379	57·61	12·35	36·19
1904	41,416	8,686	50,102	54·21	12·73	34·64
1905	42,801	8,837	51,638	54·55	12·73	34·92
1906	46,211	8,598	54,809	57·33	12·14	36·19
1907	49,894	8,209	58,103	60·06	11·34	37·37

The rate per 1,000 of the male population fluctuated during the period, but on the whole increased from 57·61 in 1903 to 60·06 in 1907 ; the proportion of females shows a decrease.

Below will be found a classification of the punishments on summary conviction in 1907 :—

Offences.	Fines Paid.	Imprisoned in default.	Imprisoned without option.	Bound over and released on probation.	Other Punishments.	Total.
Against the person ... ..	974	284	212	94	23	1,587
Against property ... ..	1,142	615	621	625	203	3,209
Against good order ... ..	21,061	16,613	837	179	1,832	40,522
Not included in the preceding	10,852	1,023	589	67	254	12,785
Total ... ..	34,029	18,535	2,262	965	2,312	58,103

As shown above, the number of convicted persons sentenced to imprisonment, without the option of a fine, was 2,262, and adding those incarcerated in default of paying the fine or of finding security, viz., 18,535, the total number imprisoned was 20,797 out of 58,103 summarily convicted by the magistrate, or nearly 36 per cent. The number of fines paid was 34,029 ; but many of those who were imprisoned in default of immediately paying the fine imposed were discharged before the term expired, the amount having been paid in the meanwhile. The total sum received by way of fines during 1907 was £41,420, of which amount £19,042 was paid into the Consolidated Revenue, £10,150 was given to the Police Reward Fund, £2,722 to municipalities, and £9,506 to informers and others.

With reference to first offenders, the Crimes Act provides that when a person who has not been previously convicted of an indictable offence is convicted of a minor offence, and is sentenced to penal servitude or imprisonment, the court may suspend the sentence upon his entering into a recognizance, with or without sureties, for his good behaviour during the period over which his sentence extends, the probationary term, however, being not less than one year in every case. Before he is permitted to depart from custody he is examined for future identification, and during the period covered by his sentence he must report himself to the police every three months. If he should fail to do so, or should again lapse into crime, he may be arrested and committed to gaol for that portion of his sentence which is still to run ; but should his behaviour be good throughout the whole of the probationary period, he is not regarded as having been convicted, and if at any time later on he is arrested for another offence a previous conviction cannot be put in against him. During the year 1907 226 persons, summarily convicted at the Magistrates' Courts, and 99 persons at the higher courts, making a total of 325, including 52 females, were released as first offenders.

#### CHILDREN'S COURTS.

The first Children's Court under the Neglected Children and Juvenile Offenders' Act was opened in October, 1905, at Paddington, within the metropolitan area, under the presidency of a specially-appointed magistrate. Special courts have since been established in suburban and country districts. The chief purpose of these courts is to remove from the trial of juvenile offenders as much as possible the disagreeable surroundings of a police court. Magistrates exercise powers and authorities in respect of

children and offences committed by or against children. They also possess the authorities of a Court of Petty Sessions or Justice under the Children's Protection Act and the Infant Protection Act. During the year 1907, the Children's Courts dealt with the cases of 3,756 males and 347 females, or a total of 4,103 persons. Of these cases 1,645 were in relation to orders.

The Neglected Children's Act prevents children from associating with reputed thieves, and the Act otherwise provides for the protection and reformation of neglected or uncontrollable children and juvenile offenders. The physical and moral well-being of the children engaged in street trading is ensured, and, to better attain this object, girls under 16 years of age are prohibited from trading, and only boys between the ages of 10 and 16 years are licensed, whilst the hours are restricted. During the year ended 31st March, 1908, licenses were issued to 795 boys. The police exercise supervision over the children whilst they are trading, selling newspapers, &c. The objects of the Act are so admirable that similar legislation has been passed in other parts of Australia.

The following table shows a classification of offences dealt with by the Children's Courts during 1907 :—

Offences.	Summarily dealt with—				Committed to higher Court.		Total.
	Convicted.		Discharged or Withdrawn.				
	M.	F.	M.	F.	M.	F.	
Against the person ... ..	64	11	74	33	24	...	206
Against property ... ..	768	49	101	10	1	...	929
Against good order ... ..	575	4	67	1	...	...	647
Other offences ... ..	571	29	66	7	1	2	676
Total ... ..	1,978	93	303	51	26	2	2,458

The figures shown above and other particulars of Children's Courts are included in the tables relating to Magistrates Courts.

#### APPREHENSIONS.

In the following table will be found the total number of persons apprehended by the police, together with the proportion per 1,000 of the population for each year of the decennial period 1898 to 1907 :—

Year.	Arrests.		Year.	Arrests.	
	Number.	Per 1,000 of Population.		Number.	Per 1,000 of Population.
1898	35,864	27.32	1903	40,561	28.57
1899	35,837	26.87	1904	38,188	26.40
1900	37,462	27.66	1905	38,172	25.81
1901	38,092	27.85	1906	39,609	26.16
1902	39,590	28.37	1907	41,842	26.91

The above figures refer to the total number of arrests made by the police in each year of the decennial period, and include the whole of the separate arrests of any particular individual.

## AGES OF OFFENDERS.

The ages of distinct persons summarily convicted after arrest for various classes of offences during the year 1907 are given below. The most serious offences were charged against persons between the ages of 25 and 30, while the largest number of offenders occurred in the age group 50 and upwards, this class including the greatest proportion of confirmed drunkards and vagrants:—

Offences.	Ages.										Total.
	Under 10.	10-14.	15-19.	20-24.	25-29.	30-34.	35-39.	40-44.	45-49.	50 and over.	
Against the person .. ..	No. 1	No. 13	No. 66	No. 197	No. 199	No. 111	No. 92	No. 52	No. 52	No. 78	No. 888
Against property .. ..	47	368	424	322	287	206	198	149	116	193	2,310
Against good order, including drunkenness .. ..	..	11	887	2,260	2,859	2,475	2,616	2,671	2,357	4,926	21,070
Not included in the preceding ..	1	12	202	353	358	214	163	129	81	131	1,644
Total .. ..	49	404	1,579	3,132	3,703	3,006	3,069	3,001	2,603	5,323	25,887

## DRUNKENNESS.

During 1907 the convictions for drunkenness with and without disorderly conduct numbered 28,109 of which 1,218 were summons cases. The following table shows the convictions for drunkenness during the last eight years:—

Year.	Convictions.			Per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1900	19,799	4,063	23,862	27.70	6.35	17.60
1901	19,569	4,234	23,803	27.28	6.51	17.40
1902	19,543	4,789	24,332	26.66	7.23	17.44
1903	19,788	4,810	24,598	26.46	7.16	17.33
1904	18,116	4,827	22,943	23.71	7.06	15.86
1905	18,996	5,007	24,003	24.21	7.21	16.23
1906	20,589	4,664	25,253	25.51	6.58	16.68
1907	23,573	4,536	28,109	28.38	6.26	18.08

Persons arrested for drunkenness are chiefly residents of large towns, and it is only natural to expect that, with an increase in the population of the towns, there should be an increase in the apprehensions for drunkenness.

The figures quoted in the foregoing table refer to total cases.

The number of convictions obtained for drunkenness during the year 1907 was 28,109. In 7,534 of these cases, or 26.8 per cent., the offence was committed between 8 a.m. on Saturday and 8 a.m. on Sunday; and in 779 other cases, or 2.8 per cent. of the total, the offence was committed between 8 a.m. on Sunday and 8 a.m. on Monday. The actual number of distinct persons convicted after arrest for drunkenness was 17,001 (14,831 males and 2,170 females) in 1906, and 17,980 (15,897 males and 2,083 females) in 1907. The Liquor (Amendment) Act, 1905, which came into force on the 1st January, 1906, contains some stringent clauses regarding the sale of liquor at licensed premises. Except in cases of sickness or accident, no person under the age of 18 years may be supplied

with liquor, whilst persons under 17 years of age are not allowed in the bar of an hotel. Females under 21 years, except in the case of a wife or daughter of a publican are not allowed to serve liquor. Hotels must be closed during the time that voting for a Parliamentary election is in progress. They are closed on Sunday, but liquor may be sold to *bonâ fide* travellers, lodgers, servants, or inmates, provided that in the case of a traveller the place where he lodged on the previous night is at least 20 miles distant, if in the county of Cumberland, or at least 10 miles if in the country districts. A publican is not, however, compelled to sell to a traveller.

The following table shows the number of convictions during the last three years for breaches of the law regarding the sale of liquor:—

Convictions for Selling—	1905.	1906.	1907.
Liquor on Sunday, and keeping premises open during that day ... ..	256	243	64
During prohibited hours other than upon Sunday ... ..	74	90	66
Liquor without a license... ..	25	66	78

The question of the relative prevalence of drunkenness, as tested by the number of persons convicted for that offence in the different States, has received considerable attention, and it has been made to appear that New South Wales, in this regard, holds a bad pre-eminence. The total convictions for drunkenness and the number per 1,000 of population in the different States and in New Zealand, for the year 1907, were as given below:—

State.	No of Convictions for Drunkenness.	Per 1,000 of population.
New South Wales ... ..	28,109	18·08
Victoria ... ..	9,151	7·34
Queensland (1906) ... ..	7,473	14·03
South Australia ... ..	2,735	7·12
Western Australia ... ..	3,535	13·40
Tasmania (1906) ... ..	454	2·51
New Zealand (1906) ... ..	11,629	12·98

In comparing the drunkenness returns of the various States, it may be pointed out that an argument founded solely on the number of cases is misleading, for a great deal depends upon the state of the law and the manner in which it is administered. In Victoria, for instance, a person is not convicted of drunkenness unless also guilty of disorderly conduct, and offenders are generally discharged on their first appearance, or if they have been arrested on Saturday and detained in custody till Monday. The extent of the area supervised must also be taken into consideration, for it is evident that the law will be less strictly enforced in the sparsely-settled districts of Queensland, South Australia, and Western Australia, than in the more thickly populated parts of Australia.

Of late years there has been a growing tendency to regard drunkenness as a disease rather than an offence. It has been frequently advocated that the drunkard should not be sent to gaol to herd with criminals and have his weakened faculties subjected to their evil influence, but should be sent to an asylum specially provided for his reception. The system of dealing with these offenders by committing them to gaol for short sentences has

proved to be practically worthless, as the same persons are constantly re-appearing before magistrates. During 1907, out of a total of 17,980 distinct persons convicted of drunkenness, 4,097, or 23 per cent., were brought up more than once. Of these, two men and four women were convicted over 20 times in the course of the year. An examination of the criminal records of the State, over a period of years, also discloses the fact that more than 40 per cent. of the gaol population commenced their career with an imprisonment on a charge of drunkenness.

The Inebriates Act provides for the special treatment of inebriates. Where a person has been convicted for drunkenness three times within a year he may be placed in an institution for a period not less than six or not exceeding twelve months. The period of detention may be extended from time to time. In August 1907 a portion of Darlinghurst Gaol was set apart for the reception of habitual inebriates; there were 16 male and 12 female inmates on the 31st December, 1907.

#### INQUESTS.

In all cases of violent or unnatural death, it is the duty of the Coroner to hold an inquiry into the cause, and to commit for trial any person found guilty by the jury of the crime of manslaughter or murder. Under the Coroner's Court Act, 1904, a Coroner is empowered to hold an inquisition, sitting alone, but upon request of a relative, of the secretary of any society of which the deceased was a member, or on the order of the Minister of Justice, a jury of six is called. Every death which takes place in gaol or in a lock-up must be investigated, and inquests must also be held on the bodies of all persons executed. Where no coroner has been appointed, or where the officer is unable to hold the usual inquest, a magistrate may hold an inquiry; but as such he is not empowered to commit a suspected person for trial, he must terminate the inquiry in all cases where facts are disclosed which point to the criminality of a person, and direct the police to prosecute at the nearest police court. Stipendiary or Police Magistrates have powers of Coroners in all parts of the State, except the metropolitan police district. The numbers of deaths during 1907, the causes of which were investigated by Coroners or Magistrates, were 941 of males and 267 of females, giving a total of 1,208 inquests and magisterial inquiries. Of the 1,208 deaths, the verdicts of the courts were that 884 were caused by violence, and of these cases 143 males and 28 females were found to have committed suicide.

It is provided that when any real or personal property has been destroyed or damaged by fire, the Coroner exercising jurisdiction in the district where the fire has occurred shall hold an inquiry, with the object of ascertaining the origin of the fire, if he consider the case to be a fit one for investigation. The procedure is similar to that followed in inquests held in connection with cases of death, and the Coroner may, in accordance with the decision of his jury, commit a person for trial on a charge of arson. Inquiries were held during 1907 into the origin of 100 fires, and the cause was ascribed to accident in 7 cases, arson in 25, to carelessness in 1 case, and in 67 instances there was insufficient evidence.

#### HIGHER COURTS—CRIMINAL JURISDICTION.

A Judge of the Supreme Court presides over the Central Criminal Court of Gaol Delivery held at Sydney, when all prisoners are tried by a jury of twelve, chosen by lot from the panel provided by the Sheriff. In capital cases the right to challenge, both by the Crown and by the accused, is limited to twenty jurors, except for cause shown, and in cases other

than those in which the sentence of death may be imposed, whether felonies or misdemeanours, the number challenged cannot exceed eight. Under the Criminal Law and Evidence Amendment Act of 1891, every person charged with an indictable offence, and the husband or wife, as the case may be, of the person so charged, shall be competent, but not compellable, to give evidence in every court on the hearing of such charge. Prior to the passing of this Act, such a privilege was granted only to those charged with bigamy. At the close of the case for the prosecution, an accused person may also make a statement in his defence without rendering himself liable to examination thereupon, either by Counsel for the Crown or by the Court. The "Accused Persons Evidence Act of 1898" provides that it shall not be lawful to comment at the trial of any person upon the fact that he has refrained from giving evidence on oath on his own behalf. The verdict of the jury must be unanimous, and they may be locked up until they either come to a verdict or are discharged by the Court. If no verdict is returned, the prisoner is liable to be tried again by another jury.

In addition to the supreme, civil, and criminal sittings of the Court held in Sydney, the Judges go on circuit once in each half-year, and hold Courts of Gaol Delivery, called Circuit Courts, for dealing with the more serious class of criminal cases, especially those in which the capital penalty is involved, and for hearing civil causes at certain circuit towns, viz.:—In the north at Newcastle, Maitland, Tamworth, Armidale, Grafton, and Lismore; in the west at Bathurst and Dubbo; and in the south at Goulburn, Wagga Wagga, Albury, Deniliquin, and Hay.

The Courts of Quarter Sessions are presided over by Chairmen, who also perform the duties of Judges of the District Courts. There are seven Chairmen of Quarter Sessions; two of these preside over the Courts in the metropolitan district, and one each in the following districts:—Southern and Hunter, south-western, northern, north-western, and western. All offences, except those involving the capital penalty, are within the jurisdiction of the Court. On the trial of prisoners at Quarter Sessions, the Chairman, at the request of the prisoner's counsel, must reserve questions of law for the consideration of the Supreme Court.

During the year 1907 there were 1,063 males and 109 females committed for trial to the Higher Courts of the State. Of these 1,172 persons, 1,130 were committed by magistrates in Petty Sessions, and 42 by Coroners. The number of persons committed during any one year does not necessarily coincide with the number placed on trial during the same period, as some persons committed at the end of one year do not make their appearance until the following year. Excluding those against whom the Attorney-General declined to file a bill, there were 1,139 distinct persons recorded in the returns of the Higher Courts of the State during 1907, 1,022 being males and 117 females. The following table shows the results in the cases of these accused persons:—

Sex.				Charged at Higher Courts.	Convicted.	Discharged, withdrawn, &c.
Males	...	...	...	1,022	573	449
Females	...	...	...	117	56	61
Total	...	...	...	1,139	629	510

Classifying these accused persons according to the nature of the offences with which they were charged, it will be found that, both in the case of males and females, offences against property are the most numerous,

followed by offences against the person. Below will be found a statement of the offences of the 629 persons convicted in higher courts during 1907:—

Offences.	Males.		Females.		Total.	
	Number.	Per cent. of total.	Number.	Per cent. of total.	Number.	Per cent. of total.
Against the person ... ..	134	23.4	19	3.9	153	24.3
Against property ... ..	364	63.5	30	5.5	394	62.6
Forgery and against the currency ...	49	8.5	1	1.8	50	8.0
Against good order ... ..	5	0.9	3	5.4	8	1.3
Not included in preceding ... ..	21	3.7	3	5.4	24	3.8
Total ... ..	573	100.0	56	100.0	629	100.0

The following statement shows the character of the principal offences of persons convicted in higher courts during each year since 1903, and affords interesting material for study:—

Offences.	1903.	1904.	1905.	1906.	1907.
Murder and manslaughter ... ..	18	18	14	13	16
Bestial offences ... ..	44	37	42	41	47
Housebreaking and burglary ... ..	140	151	127	82	75
Robbery and stealing from the person ...	44	64	43	46	28
Horse, cattle, and sheep stealing ...	94	96	56	49	33
Embezzlement and stealing by servants ...	28	20	30	23	25
Larceny and receiving ... ..	256	237	228	189	174
Fraud and false pretences ... ..	38	29	34	38	36
Forgery and uttering ... ..	45	57	59	46	48
Other offences ... ..	189	181	186	171	147
Total ... ..	896	890	819	698	629

#### GAOLS.

There are in New South Wales 52 gaols of all kinds; of these, 6 are principal, 13 minor, and 33 police gaols. The total number of cells in all gaols is 2,340. The average daily number in confinement during 1907 was 1,470.

Great changes have taken place during recent years in connection with the treatment of prisoners. Formerly, imprisonment partook somewhat of the nature of punishment for wrong-doing; but under the more humane system at present in vogue, the idea of revenge has sunk far into the background, and the strongest possible stress is laid on the moral reformation of offenders. There are still defects to be remedied—for instance, the problem of dealing with the professional criminal still awaits solution; but with regard to the latter question the Habitual Criminals Act passed in 1905 may be looked upon as a step in the right direction. The principle of restricted association has now been in force for several years, and results have amply justified its adoption. Before the introduction of this system, prisoners were classified in various groups, determined principally by the length of sentence, and their free association was doubtless productive of much mutual contamination. Under the present system, however, meals are given in the cells, and the unavoidable association at work, religious instruction, and exercise is subject to the closest supervision. As one result of the reorganisation scheme, there has been a considerable reduction in the gaol expenditure, although many hundreds of cells at night are lighted up

to a reasonable hour, and notwithstanding other necessary expenditure is incurred in carrying out the system of isolation. All prisoners serving sentences of one month and upwards, also prisoners on trial and remand, are allowed the privilege of reading selected books. The prison libraries of the State contain 23,000 volumes.

In order to ensure the proper working of the "restricted association" principle the gaols have been graded in various classes. Thus, Parramatta Gaol is reserved chiefly for old offenders; the more hopeful class are sent to Bathurst and Maitland; Goulburn receives first-offenders; and various types of offenders against good order are dealt with at suitable smaller establishments. Portions of the country prisons are set apart for short-sentenced prisoners, while Darlinghurst and Biloela receive metropolitan offenders of this class. Further modifications will be introduced on the completion of the penitentiary now in course of erection.

The number of prisoners in confinement at the close of each year during the last decennial period will be found below. Prisoners have been classified under two heads—those under sentence, and those waiting trial, debtors being excluded.

Year.	Under sentence.		Awaiting trial.		Total.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
1898	1,759	175	135	12	1,894	187	2,081
1899	1,693	171	105	15	1,798	186	1,984
1900	1,612	179	100	6	1,712	185	1,897
1901	1,499	197	106	10	1,605	207	1,812
1902	1,516	182	130	7	1,646	189	1,835
1903	1,544	167	97	8	1,641	175	1,816
1904	1,544	175	128	30	1,672	205	1,877
1905	1,414	155	94	15	1,508	170	1,678
1906	1,281	149	76	13	1,357	162	1,519
1907	1,275	162	46	6	1,321	168	1,489

The prisoners under sentence at the end of the year 1907 include 16 male and 12 female inebriates.

A very large proportion of the prisoners received into gaol on summary conviction consists of persons imprisoned in default of payment of fines. Doubtless many of these were too poor to pay the fines, so that it would appear that their poverty was more accountable for their imprisonment than the actual breach of law committed by them. Under the Justices Act, 1892, when a person is imprisoned for non-payment of an amount adjudged to be paid by the conviction on order of a Justice, he may pay under prison rules a portion of the fine, and be relieved of a proportionate part of the imprisonment to which he was sentenced. The following table shows that large numbers of prisoners avail themselves of the provisions of the Act, and many days of the sentences have been remitted:—

	1904.	1905.	1906.	1907.
Persons committed to gaol in default of payment of fines ...	7,681	7,347	6,853	6,635
Prisoners subsequently released after paying portion of fines ...	1,287	1,247	1,327	1,510
Amount received at gaol as part-payment of fines ...	£2,370	£2,665	£2,387	£2,766
Days prisoners would have served if portion of fines had not been paid ...	31,539	33,487	33,794	42,507
Days remitted by part-payment of fines ...	22,035	22,389	14,100	28,379

The punishments awarded to offenders vary from nominal imprisonment to the extreme penalty of death. Prisoners under sentence of hard labour are given such work as the prison authorities consider within the meaning of the sentence. Penal servitude is not awarded for a shorter term than three years, and involves hard labour. Prisoners undergoing a sentence of imprisonment without labour are treated differently from others, and if they entirely maintain and clothe themselves they are exempted from any work; otherwise they contribute to their own support by performing such labour as may be allotted. Under section 436 of the Crimes Act, where a prisoner has been convicted of a felony, attended with violence to the person, or committed by the offender when armed, or by means of any threat, or by putting in fear, the Court may direct that he may be kept in irons for a portion of his imprisonment, but not extending beyond the first three years.

The effect of punishment in reforming criminals, or in restraining them from the commission of crime, is a subject upon which much has been written. It is certain that in New South Wales there has been a great decrease in crime, but it seems equally certain that this satisfactory state of things is due to an improvement in the material and intellectual condition of the whole community, and not to any deterring effect which punishment has had upon the criminal; indeed, as far as concerns the minor offences—such as drunkenness, vagrancy, and petty thieving—the beneficial effects of the present system of punishment are by no means obvious.

There has been considerable discussion in recent years concerning the sentencing of prisoners. Some persons argue in favour of progressive sentences, while it is urged by others that the present system savours too much of mere revenge for wrong-doing, and the principle of indeterminate sentences is advocated. Under the latter method prisoners would be detained in gaol until such time as their moral reformation was complete, while the hopelessly incorrigible would suffer total deprivation of liberty. The Comptroller-General of Prisons is of opinion that persons who now go to gaol for minor offences, or for offences of a quasi-criminal nature, could very well be treated under a system of probation, which would be much more effective and less costly than the present system of sending such persons to gaol. The Habitual Criminals Act, which came into operation in 1905, gives the judges the power of declaring a prisoner to be an habitual criminal if such prisoner has been previously convicted of a similar offence, as mentioned in the Act, on at least three, or in certain cases two occasions, either within or without the State. The definite part of the sentence is served as an ordinary prisoner, after which he is detained until, in the opinion of the authorities, he is deemed fit to be at large. During 1907 11 prisoners were dealt with under this Act, making a total of 23 persons since the system came into operation. Nothing definite can, perhaps, yet be said as to its efficacy; but the provisions of the Act have been made known by the gaol authorities to prisoners, and the likelihood of these criminals being called upon to suffer loss of liberty, under the statute, should they again be convicted, has already, without doubt, made a great impression on the minds of the criminal classes.

Under the Prisons Act, 1899, a Visiting Justice is appointed to visit each prison at least once in every week. Judges of the Supreme Court may at any time visit and examine any prison, and similar power to examine is given all Justices of the Peace. The Visiting Justice is empowered to hear and determine all complaints which may be made against a prisoner of disobeying the rules of the gaol, or of having

committed any offence, and may pass a sentence of confinement in a solitary cell for a term not exceeding seven days. In cases of persistent insubordination, a charge upheld before two or more Justices of the Peace renders the prisoner liable to a sentence of close confinement for one month; and if the culprit is a prisoner convicted of felony, or serving a sentence of hard labour, a punishment of personal correction may be awarded.

There were 46 persons—42 males and 4 females—imprisoned for debt during the year 1907. As the time of detention, as a rule, only extended over a short period, the number of debtors in confinement at any one time was not large, and on the 31st December, 1907, there was only 1 male in gaol from this cause. The number of persons sent to gaol for debt during each of the last ten years will be found in the following table:—

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1898	81	4	85	1903	53	6	59
1899	53	1	54	1904	62	7	69
1900	59	3	62	1905	63	12	75
1901	49	2	51	1906	57	14	71
1902	57	1	58	1907	42	4	46

The following table gives the number of the prisoners employed at the end of 1907, and those engaged in the principal callings in principal and minor gaols. In some of the gaols there are no means of finding suitable employment of a profitable and useful nature, otherwise the number shown could be very much increased; and it must also be remembered that there are many prisoners whose services are not available for labour, such as those whose sentences do not carry hard labour, and those exempt from work on account of medical and other reasons. The net value of the labour done during 1907 amounted to £23,819; but this sum is taken to refer exclusively to labour of a productive character.

Carpenters and assistants ...	39	Hatmakers ...	36
Painters ...	11	Washing and Gardening ...	56
Blacksmiths and assistants ...	21	Working outside ...	67
Tinsmiths ...	18	Needlework and Knitting ...	115
Saddlers ...	17	Sweepers and cleaners ...	123
Marble workers ...	10	Cooks' Assistants ...	55
Labourers ...	57	Wood and water gang ...	17
Matmakers ...	56	Other employments ...	348
Shoemakers ...	99	Unemployed ...	177
Tailors ...	163	Total (including 1 debtor) ...	1,490

At most of the gaols considerable attention is paid to agriculture, the produce of vegetables and forage during the year being valued at £1,352.

Persons committed for trial are allowed to see their legal advisers and others who may visit them in reference to their case. They are allowed to wear their own clothing; and other privileges, consistent with safe custody, are granted to them. Persons under examination are not allowed to have any communication made to them while in the prison except by their legal advisers, unless such a proceeding is specially sanctioned by the Justice conducting the examination.

On account of good conduct and industry, prisoners may be recommended for a remission of sentence, in accordance with a classified scale. No remission is granted where the sentence is less than three months, nor on any period passed in separate treatment. The remission scale does not affect sentences commuted from capital convictions, in which case the prisoner may petition for release after serving twenty years, or, in some cases, at a less period. Generally speaking, the treatment which favours the lesser offender has been adopted in other parts of gaol routine.

Under the Crimes Act a prisoner under sentence may be granted a written license to be at large within specified limits during the unexpired portion of his sentence. Sureties are required, unless under exceptional circumstances, for good behaviour and observance of the conditions of the license. The prisoner who is liberated is required to report himself periodically to the police, and is liable to have his license cancelled and to be committed to gaol to undergo the remainder of his sentence, by any breach of the conditions upon which he was released. This system was first adopted in September, 1891, and at the end of 1907 there were 23 licenses still in force—those of 21 males and 2 females.

In view of the neglected state in which many of the prisoners are received, it may be said that the death-rate in gaols is light, and it shows moreover, signs of decreasing. More especially in the country districts, persons are frequently received into gaol in the last stages of disease, and aged and infirm paupers, for whom a hospital or asylum is the befitting destination. Thereby an undue inflation of the death-rate is necessarily caused. A comparison between the death-rate in gaols and that of the general population is difficult to make, but it may be said generally that the death-rate of all persons received into gaol is at present not greater than that of the general population of like ages, while the death-rate of habitual criminals is largely below the average. In the following table the number of deaths, exclusive of those resulting from executions, is given for 1890, and subsequent periods, together with the death-rate per 1,000 of the average number of prisoners in confinement during the year:—

Year.	Deaths.			Death-rate per 1,000 persons in confinement.
	Males.	Females.	Total.	
1890	24	2	26	11.50
1895	19	3	22	8.83
1900	15	3	18	9.02
1905	12	1	13	6.98
1906	5	3	8	4.90
1907	9	1	10	6.48

With the exception of the year 1906, the death-rate in 1907 was the lowest recorded.

#### POLICE.

At the end of the year 1907 the Police Force of New South Wales consisted of 2,381 men of all ranks, of whom 775 were mounted. The force which comprises 13 superintendents, 12 inspectors, 37 sub-inspectors, 216 sergeants, 2,083 constables, and 20 detectives, is commanded by an Inspector-General, subject to the control of the Chief Secretary of the State. There are also 64 black trackers and 5 female searchers.

Below will be found the number of police in the metropolitan and country districts at the close of each of the last ten years. It will be seen that with the growth of population the force is steadily increasing in strength, the present proportion being 1 police officer to every 661 inhabitants, as compared with 1 to every 676 persons ten years ago:—

Year.	Metropolitan.	Country.	Total.	Number of Inhabitants to each Police Officer.
1898	792	1,165	1,957	676
1899	821	1,195	2,016	667
1900	888	1,254	2,142	637
1901	909	1,263	2,172	635
1902	950	1,272	2,222	633
1903	979	1,291	2,270	631
1904	1,006	1,304	2,310	633
1905	1,048	1,294	2,342	639
1906	1,035	1,307	2,342	654
1907	1,057	1,324	2,381	661

The protection of life and property is not the only duty which the police are called upon to perform. On the contrary, a large portion of their time is taken up in the collection of the agricultural and stock schedules, the returns of works and manufactories, and other duties of a like character. In many cases they also act as Clerks of Petty Sessions and Warden's clerks, mining registrars, gaolers, inspectors under various Acts, collect information for electoral rolls, and fill other offices having no direct connection with police duties. A list showing the nature of all such offices held and the duties performed has been given in the annual report of the Police Department, under no less than sixty-seven headings.

With a view to making better provision for the regulation of traffic within the Metropolitan Police District, the Metropolitan Traffic Act was passed during the year 1900. Under this law the police generally are empowered to control the street traffic, and in 1907 there were 83 police officers specially detailed for this work. The duties of the police vary so much in the different States that any comparisons which neglect to take this factor into consideration are considerably vitiated thereby. Differences in area and physical characteristics must also be regarded in dealing with the figures shown in the following table, which exhibits the strength of the police force, exclusive of trackers, in each State and New Zealand at the close of the year 1907:—

State.	Police.	To each Police Officer.	
		Inhabitants.	Square miles.
New South Wales ...	2,381	661	130
Victoria ...	1,546	806	57
Queensland (1906)...	952	569	704
South Australia (1906) ...	422	910	2,141
Western Australia ...	488	543	2,000
Tasmania (1906) ...	229	787	114
New Zealand ...	734	1,266	143

A comparison of the cost of the police forces of the various States will be found below. The greater proportion of mounted troopers in those States where there are thinly-populated districts tends to make the average cost somewhat higher than in the other provinces:—

State.	Police Force.	Total Cost of Police Force.	Average Cost per unit of the Force.	Average Cos per head of Population.
	No.	£	£ s. d.	s. d.
New South Wales ... ..	2,331	443,172*	186 2 7	5 8
Victoria ... ..	1,546	276,957*	179 2 11	4 5
Queensland ... ..	952	180,994*	190 2 5	6 10
South Australia (1906-7) ... ..	422	84,315*	199 16 0	4 5
Western Australia ... ..	488	120,582*	247 1 11	9 2
Tasmania ... ..	229	33,147	144 14 11	3 8
Commonwealth ... ..	6,018	1,133,167	189 5 10	5 6
New Zealand ... ..	734	157,932	215 3 4	3 5
Australasia ... ..	6,752	1,297,099	192 2 1	5 1

\* Year ended 30th June.

#### COST OF POLICE AND PRISON SERVICES.

The following table shows the amount expended in maintaining the police and prison services of New South Wales during the last five years, and also the amount of fines paid into the Consolidated Revenue, and the net return from prison labour:—

Expenditure and Revenue.	1903.	1904.	1905.	1906.	1907.
Expenditure—	£	£	£	£	£
Police ... ..	431,631*	435,974*	434,684*	427,285*	443,172*
Penal establishments ... ..	136,800	119,874	100,947	98,893	98,440
Total ... ..	568,431	555,848	535,631	526,178	541,612
Revenue—					
Fines ... ..	14,272	15,152	16,636	17,908	19,042
Net return from prison labour... ..	15,916	19,452	22,508	22,242	23,819
Total .. ..	30,188	34,604	39,144	40,150	42,861
Net Expenditure ... ..	538,243	521,244	496,487	486,028	498,751
Per Inhabitant ... ..	s. d. 7 7	s. d. 7 2	s. d. 6 9	s. d. 6 5	s. d. 6 5

\* Financial year ending subsequent 30th June.

It is to be understood that the value of prison labour set down in the above table represents labour of a productive character only.

#### EXTRADITION.

The Imperial statutes in force in New South Wales for the surrender of fugitive criminals are the Extradition Acts of 1870 to 1895, and the Fugitive Offenders Act of 1881. The former provide for the surrender to foreign States of persons accused or convicted of certain crimes within

the jurisdiction of such States, and for the trial of criminals surrendered to British dominions. Treaties for the extradition of fugitive criminals exist between His Majesty's Government and, with few exceptions, every foreign Government. In proceedings taken in New South Wales under the Extradition Acts the fugitive is brought before a Stipendiary or Police or special Magistrate, authorised by the Governor-General under the Commonwealth "Extradition Act, 1903," who hears evidence on oath, and, if satisfied that the person is liable to be extradited, makes out a warrant to that effect. At the hearing of the case, the Consul for the country of which the person charged is a subject, the Crown Solicitor, and the Inspector-General of Police are represented. If a warrant is made out, the prisoner is sent to Darlinghurst Gaol for fifteen days prior to extradition, during which interval he may apply to the Supreme Court for a writ of *habeas corpus*. During the ten years ended 1907, there were altogether 9 persons extradited, all of whom were escapees from the French penal settlement of New Caledonia.

Under the Fugitive Offenders Act, 1881, provision is made for the surrender from the United Kingdom to a British possession or *vice versa*, or from one British possession to another, of fugitives charged with the perpetration of crimes which are, in the part of His Majesty's dominions where they are committed, punishable by imprisonment with hard labour for twelve months or more, or by some greater penalty. Persons apprehended under the Act are dealt with at a Magistrate's Court, and their cases are included in the figures relating to the business transacted at such courts, and not in the returns relating to the Extradition Court.

During 1907 25 fugitive offenders—of whom 23 were males and 2 females—were arrested in other parts of His Majesty's dominions, or in foreign countries, and returned to New South Wales. Of these, 5 were summarily convicted before magistrates, and 13 were committed to higher courts, the other 7 cases being discharged.

There were also 34 fugitive offenders from other portions of His Majesty's dominions, arrested in New South Wales, and brought up at Magistrates' Courts during the year. Of these, 14 were remanded to Victoria, 8 to Queensland, 7 to New Zealand, 2 to South Australia, 1 to Western Australia, and 1 to South Africa, while 1 was discharged.

#### DECREASE IN CRIME.

There are two ways available for testing the comparative growth of crime: the first, which is by comparing the number of arrests with the whole population of the country, may be said to be a general test as to lawlessness; the second is a comparison of the persons committed for trial by jury with the whole population, and as all serious offenders are so tried, this may be looked upon as a test of the prevalence of serious crime. In making comparisons of this kind, it must be borne in mind, first, in regard to apprehensions, that as new laws are continually being made, and the large proportion of such laws attach the penalty of fine or imprisonment to their breach, the number of offences for which a person is liable to be apprehended has constantly been increasing; and second, that the general tendency of late years has been for magistrates to deal summarily with a large proportion of the cases submitted to them. Hence it is quite possible that crime might be fairly constant as to occurrence, and yet the returns may show an increase of apprehensions and a decrease of committals. The tables given hereunder indicate that

crime has largely decreased. The first table shows, in quinquennial periods, the mean population, the average number of apprehensions, and the proportion of these to the general population:—

Period.	Mean Population.	Apprehensions.	
		Average Annual.	Per 1,000 of Population.
1870-74	526,733	19,422	36·87
1875-79	633,255	28,837	45·54
1880-84	802,712	41,262	51·40
1885-89	1,000,744	39,406	39·38
1890-94	1,174,963	37,854	32·22
1895-99	1,291,563	36,145	27·99
1900-04	1,396,751	38,779	27·76
1905-07*	1,515,959	39,874	26·30

\* Three years.

It cannot be claimed that 26·30 apprehensions per 1,000 of population is a low average, but it is a marked improvement on the rates of previous years. The comparison made above has reference to the whole population; but as few persons under 15 years of age commit crimes, children under that age have been excluded from the following statement, which compares the periods 1879-82, 1889-92, and 1899-1902, these periods being selected on account of the number in each age-group being accurately determinable from the results of the last three Census enumerations. The following figures relate to males:—

Age Group.	Average Annual Arrests.			Per 1,000 of Population.		
	1879-82.	1889-92.	1899-1902.	1879-82.	1889-92.	1899-1902.
15—19 years ... ..	1,734	1,882	1,727	45·43	34·68	24·49
20—29 „ ... ..	8,884	9,939	6,500	118·29	84·33	54·65
30—39 „ ... ..	8,141	8,848	6,462	143·58	95·65	61·49
40—49 „ ... ..	5,945	5,803	5,097	136·14	99·20	64·99
50 years and over... ..	5,061	5,045	4,304	113·47	73·15	46·30

In every age-group there has been a decided fall in the proportion of arrests, but the improvement is most marked in the higher age-groups. The decline in the proportion of females arrested is even more noticeable than amongst the males. The following figures relating to females are on the same basis as those in the preceding table:—

Age Group.	Average Annual Arrests.			Per 1,000 of Population.		
	1879-82.	1889-92.	1899-1902.	1879-82.	1889-92.	1899-1902.
15—19 years ... ..	484	463	247	12·88	8·50	3·49
20—29 „ ... ..	1,813	1,814	1,081	30·23	18·07	8·93
30—39 „ ... ..	2,018	1,600	749	50·02	25·00	8·47
40—49 „ ... ..	1,471	1,035	604	54·10	25·31	10·49
50 years and over... ..	1,118	740	449	41·22	16·37	6·62

In considering the figures in this and the preceding table, regard must be paid to the fact that the arrests refer to distinct persons for the period 1899-1902 only, whereas in the earlier years they relate to all arrests; but even when due allowance has been made on this score, it will be found that the decline is sufficiently notable.

Turning to the committals to the higher courts, and the convictions there, an even more decided decline is noticeable; and as the committals represent the more serious types of offences, the decline must be looked upon as specially satisfactory:—

Period.	Committals.		Convictions.	
	Annual Average.	Per 1,000 of Population.	Annual Average.	Per 1,000 of Population.
1870-74	1,134	2.15	644	1.22
1875-79	1,506	2.38	881	1.39
1880-84	1,693	2.11	1,044	1.30
1885-89	1,539	1.54	885	0.88
1890-94	1,479	1.26	916	0.78
1895-99	1,393	1.08	829	0.64
1900-04	1,356	0.97	809	0.58
1905-07*	1,331	0.88	715	0.47

\* Three years.

The fall in rates has been nearly continuous over the whole period, convictions for serious offences being proportionately much less than they were thirty-eight years ago.

It may be taken, then, as clearly proved that there has been a great decrease in crime during the period named, and the reform has been due to a general improvement in the community itself, and not to the reform of individuals by reason of the deterrent effect of punishment inflicted.

Perhaps the most serious defect in the treatment of offenders arises from the fact that any reformatory effect from detention in gaol, until within comparatively recent years, ceased with the prisoner's discharge. The Prisoners' Aid Association does good work in the direction of finding employment for prisoners on the completion of their sentences, in taking charge of gratuities earned by them in gaol, and in various other ways. During the six and a half years in which the Association has been in existence, 1,746 prisoners have been assisted, of whom only 192 have been reconvicted. The Salvation Army organisation possesses several excellent institutions where friendless persons of this class are received and encouraged. In many instances, however, released prisoners simply seek their criminal friends, and again qualify for speedy readmission to gaol.

## PUBLIC FINANCE.

### SYSTEM OF REVENUE AND EXPENDITURE ACCOUNTS.

A COMPLETE revolution in the system of keeping the public accounts was effected in the year 1895, when an Act amending the Audit Act of 1870 received the Royal assent. It was thereby declared "that all appropriations from the Consolidated Revenue Fund shall lapse at the close of the financial year to which they refer, and from the 1st day of July, 1895, the cash receipts within the financial year shall be considered as the actual income, and the cash payments during the same period the actual outlay." This introduced what is usually termed the "cash basis" which has proved to be in the interests of economy and good government.

Prior to the adoption of this system, the expenditure for the services of a year and the actual expenditure during that year could be shown only by two different methods of accounts. When a specific appropriation was made for any service, the expenditure incurred under such authorisation would be charged against the year for which the vote was taken, irrespective of the date when the payments were made; and, therefore, the public accounts for any year could not be closed until all appropriations lapsed, or were written off or exhausted. The consequence was, that when the expenditure exceeded the income, there were frequent differences of opinion between the incoming and outgoing Treasurers as to the propriety of charging items, sometimes of large amount, to particular years, with the result that conflicting statements were made, to the confusion of the inexpert and to the detriment of the public credit.

Even under the present circumstances, an inquirer may occasionally have some trouble in comprehending the most carefully prepared statement of the finances of the State, for he must ever keep before his eyes the fact that the term "expenditure" in the official statements does not possess always the same meaning. There are refunds, advances, cross entries, cancellations, &c., to be noted, so that any presentation of the accounts is rarely complete in itself.

Under the cash system, the expenditure should be debited to the year in which the payment is made, and not to the year in which the appropriation was authorised and the adjustment effected. This method has been adopted in the subsequent statements relating to expenditure from Consolidated Revenue, and an analysis of the Treasurer's Advance Account since the 1st July, 1896, and the Expenditure Suspense Account for the years ended 30th June, 1899, 1901, 1902, and 1903, has been carried out, and the payments attached to the year in which they were actually made.

From the 1st July, 1899, to the 30th June, 1908, there was expended in the public service a sum of £115,072,683, while the actual revenue obtained was £116,679,382; the total excess of revenue during the ten years being £1,606,699. The actual excess of expenditure in some years,

however, was serious, as will be seen from the statement below. The figures are exclusive of advances repaid and made; but for the years ended June, 1907, and 1908, the statements of expenditure include transfers in aid of the Public Works Fund and Closer Settlement Fund.

Year ended 30th June.	Gross Revenue.	Gross Expenditure.	Excess of Revenue over Expenditure.	Excess of Expenditure over Revenue.
	£	£	£	£
1899	9,754,185	9,743,509	10,676	.....
1900	10,203,931	10,316,381	.....	112,450
1901	10,805,543	10,922,862	.....	117,319
1902	11,178,214	11,179,031	.....	817
1903	11,532,231	11,703,397	.....	171,166
1904	11,453,744	11,525,304	.....	71,560
1905	11,514,324	11,372,481	141,843	.....
1906	12,471,473	11,575,255	896,218	.....
1907	13,570,380	12,799,797	770,583	.....
1908	14,195,357	13,934,666	260,691	.....

The total gross expenditure for the year ended 30th June, 1908, includes £1,404,479 transferred to the Public Works Fund, and £200,000 transferred to the Closer Settlement Fund. It is obvious that if these amounts were not included in the expenditure the excess of revenue would be increased considerably.

Anyone unacquainted with the peculiarities of State finance might find it hard to understand how it is possible for a large deficit to have accumulated, and an expenditure in excess of revenue to have been still further indulged in. The explanation is simple. Through the operation of various Acts of the Legislature, and the accumulations in the Government Savings Bank, the Treasury has at its disposal large sums in trust, and by the use of this money the accumulated deficits have been temporarily met. When in 1889 the deficit was consolidated, and Parliament authorised the issue of Treasury Bills to pay it off, these bills were not issued to the public, but, by entries in the books of the Treasury, the necessary sum was drawn from the Trust Funds in hand, and invested in the bills. This was only a formal operation, as the money had already been lent to the revenue, and the issue of the bills simply converted a floating into a fixed debt.

#### GENERAL BANKING ACCOUNT.

The following table indicates each of the main accounts under which the Government conducts its financial business, the subsidiary accounts being operated on under one or other of the headings enumerated. The Audit Act of 1902 provides that the Treasurer may agree with any Bank or Banks for the transaction of the general business of the State. The accounts are kept under four headings, viz., Consolidated Revenue Account, General Loan Account, Trust Account, and Special Deposits Account; but other accounts may be opened if necessary. All moneys paid into any of the accounts mentioned are declared to be "public moneys," and for interest purposes the several accounts are treated as one account. The Special Trust Accounts, which consist principally of "Supreme Court Moneys," are not controlled by the Audit Act, as they are operated

on directly by the officials in charge of the departments interested. Until the year just closed, the Trust Funds, to which attention will be subsequently directed, largely assisted in keeping the accounts in credit. The position of the main divisions of the General Account on the 30th June, 1908, will be found in the following statement:—

Head of Account.	Ledger Balances on 30th June, 1908.		
	Invested in Securities.	Cash Balances.	Total.
Trust Account— Government Savings Bank .. .. .	£ 700,000	£ 445,292	£ 1,145,292
Special Deposits Account— Fixed Deposits Account .. .. .	32,833	457,752	20,300
State Debt Commissioners' Trust Account .. .. .			88,553
Public Works Department Store Advance Account .. .. .			84,775
Railway Store Account .. .. .			86,876
Other .. .. .	500,000	1,176,924	210,081
Consolidated Revenue Fund .. .. .			1,676,924
Special Accounts— Colonial Treasurer's Supreme Court Moneys Accounts .. .. .	1,232,833	231,565	231,565
Closer Settlement Account .. .. .		410,004	410,004
Public Works Account .. .. .		744,692	744,692
General Loan Account .. .. .	1,232,833	Dr. 691,931	Dr. 691,931
Ledger Balances on 30th June, 1908..	£ 1,232,833	2,774,298	4,007,131

The distribution of the cash balance on the 30th June, 1908, is set forth in the following table, the London accounts being shown to the latest date available before the closing of the Public Accounts for the financial year:—

Sydney Balance—30th June, 1908—	£	£	£
Trust Account—Bank of New South Wales .. .. .	395,292	445,292	
" " Commercial Banking Company of Sydney .. .. .	50,000		
Special Deposits Account—Bank of New South Wales .. .. .	431,751	457,752	
" " " Commercial Banking Company of Sydney .. .. .	26,001		
Consolidated Revenue Account—Bank of New South Wales .. .. .	912,230	1,176,924	
" " " Commercial Banking Company of Sydney .. .. .	239,644		
" " " Cash in hands of Receiver .. .. .	25,000	1,386,261	3,466,229
Special Accounts—Bank of New South Wales .. .. .	976,257		
" " Commercial Banking Company of Sydney .. .. .	410,004	1,401,345	2,693,276
Less Debit Balances— General Loan Account—Bank of New South Wales .. .. .	1,300,958		
London Remittance Account—Bank of New South Wales .. .. .	100,387	1,401,345	1,372,953
" " " Commercial Banking Company of Sydney .. .. .			
Total Cash in Sydney .. .. .	£ .. .. .		
London Balance at date of latest advices— Public Account .. .. .		101,345	1,401,345
On deposit at short dates .. .. .		1,300,000	
Total Cash in London .. .. .	£ .. .. .		
Total .. .. .	£ .. .. .		2,774,298

In previous years the Public Accounts included all the invested assets of the Government Savings Bank. Upon the passing of the Government Savings Bank Act, 1906, these assets were vested in the Commissioners appointed under that Act, and are no longer included in the statements relating to the Public Accounts. These securities amounted to £9,693,448 at the 31st December, 1907, and the figures in the last two statements

would have been increased by that amount but for the new procedure. It will be seen above, however, that the Colonial Treasurer still holds moneys belonging to the Government Savings Bank. Such moneys are the sums not invested when the Act came into force.

#### CONSOLIDATED REVENUE FUND.

It was not always possible, even for a well-equipped and patient student, to obtain more than a general idea of the state of the finances during the existence of the old system of account-keeping which came to an end in 1895. Now that the system of keeping accounts on a cash basis is properly in operation, in estimating the financial position of the country, there have still to be considered the Old Deficiency Account, the New Account under the Audit Act Amendment Act, which form the Consolidated Revenue Account, as well as the Loans Account and the various Trust Accounts not forming part of the Consolidated Revenue Account. The Old Deficiency Account properly began in 1885; but it was only in 1897, when the last obligation under the old system of account-keeping was met, that the position of this account for each year could be accurately stated. Until all obligations had been met, only an approximation could be made, the accuracy of which rested on the correctness of the Treasurer's estimate of the liabilities outstanding for previous years.

The confusion which had attended the presentation of the public accounts of the State no longer exists now that operations on the Old Deficiency Accounts have been closed. The following table shows the Accumulated Deficiency on the Consolidated Revenue Account for each of the last ten years. The Treasury Bills issued have been included in the statement, as they were made part of the Consolidated Revenue Account proper :—

Financial Year.			At the close of each Year.				
			Treasury Bills Current.	Cash.		Suspense Accounts and recoup to Rail- way Loan Redemption Fund.	Accumulated Deficiency.
				Credit.	Overdraft.		
			£	£	£	£	£
30	June,	1899 ...	2,172,447	116,523	.....	846,468	2,902,392
30	"	1900 ...	2,022,447	17,742	.....	767,498	2,772,203
30	"	1901 ...	1,872,447	.....	152,187	755,179	2,779,813
30	"	1902 ...	2,477,626	.....	236,781	.....	2,714,407
30	"	1903 ...	2,227,626	.....	484,356	.....	2,711,982
30	"	1904 ...	1,977,626	.....	524,064	.....	2,501,690
30	"	1905 ...	1,727,626	.....	336,891	.....	2,064,517
30	"	1906 ...	1,814,516	896,124	.....	.....	918,392
30	"	1907 ...	1,561,632	1,471,344	.....	.....	90,288
30	"	1908 ...	1,214,516	1,676,924	.....	.....	*462,408

\* Surplus.

Although Treasury Bills to the amount of £1,214,516 were current on the 30th June, 1908, the credit balance of the Consolidated Revenue Fund could have covered their extinction and have left an available surplus of £462,408. The liability on account of these bills is being reduced by annual instalments of £300,000. Should this arrangement be followed, and no further issues take place in the meantime, four years must elapse before the debt will be extinguished. The immediate liquidation of the remaining

liability would effect a considerable saving in interest, but the same result is practically attained, as shown later on, by the manner in which it is proposed to use surpluses.

The "Treasury Bills Deficiency Act, 1905," by which authority was given for the issue of Treasury Bills to liquidate the overdraft on the Consolidated Revenue, provides that, in the event of a surplus on the year's transactions of the Consolidated Revenue, the Treasurer shall pay to the State Debts Commissioners the sum of £50,000, with a view to extinguishing the liability of the Bills. This amount is in addition to that of £250,000 already made a charge on the revenue, for a similar purpose, by prior enactments and makes up the amount of £300,000 per annum mentioned above.

#### REVENUE AND EXPENDITURE.

The gross and net revenue proper at intervals since 1880 were as follow :—

Year.	Gross Revenue (exclusive of Advances).	Refunds.	Net Revenue proper.	
			Total.	Per Inhabitant.
	£	£	£	£ s. d.
1880	4,904,230	97,841	4,806,389	6 11 11
1890	9,494,584	188,893	9,305,691	8 8 11
*1900	10,203,931	230,195	9,973,736	7 8 5
*1901	10,805,543	193,121	10,612,422	7 15 6
*1902	11,178,214	170,858	11,007,356	7 19 7
*1903	11,532,231	236,162	11,296,069	8 0 6
*1904	11,453,745	205,417	11,248,328	7 17 2
*1905	11,514,324	177,406	11,336,918	7 15 2
*1906	12,471,473	188,391	12,283,082	8 4 2
*1907	13,570,380	177,945	13,392,435	8 14 11
*1908	14,195,357	234,594	13,960,763	8 17 6

\* Twelve months ended 30th June.

Under the provisions of the Commonwealth of Australia Constitution Act, the control of Customs and Excise and the administration of the Post and Telegraph and Defence Departments were transferred to the Federal Government, the first-named on the 1st January, 1901, and the others on the 1st March, 1901. The Patents Office was transferred on the 1st June, 1904. The revenue derived from those sources, since the transfer, has been included only to the extent of the balance paid over to the State after deducting the expenditure incurred in connection with transferred services, and the proportion of other or new expenditure for which the State was liable.

The figures relating to revenue, both above and in subsequent tables, are exclusive of "Advances repaid"; and in dealing with expenditure, "Advances made" have been excluded from consideration, as transactions under these heads do not affect the ordinary revenue and the expenditure therefrom. The terms "net revenue" and "net expenditure," used both here and in subsequent pages, are to be taken as meaning revenue and expenditure freed from the transactions just mentioned as well as from refunds.

The net expenditure for years corresponding with those in the revenue statement is given in the subjoined table, it being assumed that the accounts are on a cash basis—that is, that each year's business is complete within that year. The term used in the table, "Expenditure from revenue of current year," must not be taken in a literal sense, as in only five years during the last decade has the revenue sufficed for the expenditure. This will be seen by comparing the annual expenditure given

below with the revenue for the corresponding years shown in the preceding table:—

Year.	Net Expenditure, exclusive of Advances.			Per Inhabitant.		
	From Revenue of current year.	From Accumulated Surplus.	Total.	From Revenue of current year.	From Accumulated Surplus.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
1880	5,129,028	331,287	5,460,315	7 0 9	0 9 1	7 9 10
1890	9,385,669	3,677	9,389,346	8 10 3	0 0 1	8 10 4
*1900	10,086,186	.....	10,086,186	7 10 1	.....	7 10 1
*1901	10,729,741	.....	10,729,741	7 17 3	.....	7 17 3
*1902	11,008,173	.....	11,008,173	7 19 7	.....	7 19 7
*1903	11,467,235	.....	11,467,235	8 2 11	.....	8 2 11
*1904	11,319,888	.....	11,319,888	7 18 2	.....	7 18 2
*1905	11,195,075	.....	11,195,075	7 13 2	.....	7 13 2
*1906	11,386,864	.....	11,386,864	7 12 3	.....	7 12 3
*1907	12,799,797	.....	12,799,797	8 7 3	.....	8 7 3
*1908	13,700,072	.....	13,700,072	8 14 2	.....	8 14 2

\* Twelve months ended 30th June.

The apparently large increase in expenditure during the last two years is due to the transfers from the Consolidated Revenue Fund of large sums to the Public Works Fund and the Closer Settlement Fund which have been in operation during those years only. Excluding these transfers the expenditure, per inhabitant, was £7 15s. 4d. in 1907, and £7 13s. 9d. in 1908. In the year ended 30th June, 1908, the transfers increased the expenditure per inhabitant by £1 0s. 5d. As the moneys so transferred are applied to public works previously charged to the General Loan Account, the practice means that smaller loans will need to be raised, and the State will escape the interest and flotation charges. The advantages of the new system are obvious, and will be especially apparent when the current liability on Treasury Bills has been liquidated.

With a view of obtaining a proper conception of the sources from which the revenue is derived, and the objects upon which expenditure is made, the subjoined table has been prepared, covering the last triennial period. In the table a separation has been effected between purely governmental receipts and expenditure, and that involved in the business undertakings of the State. The figures are exclusive of advances made and repaid:—

REVENUE AND RECEIPTS.				1905-6.	1906-7.	1907-8.
Governmental—				£	£	£
Surplus Revenue returned by Commonwealth	..	..	..	2,742,770	3,022,351	3,591,371
Taxation—						
Stamp Duties	..	..	..	580,158	633,567	565,242
Land Tax	..	..	..	329,998	345,497	178,889
Income Tax	..	..	..	266,233	283,422	215,283
Licenses	..	..	..	121,387	118,819	118,120
Total	..	..	..	1,297,776	1,381,305	1,077,534
Land Revenue—						
Alienation	..	..	..	1,066,741	1,128,768	995,069
Occupation	..	..	..	551,734	616,539	619,426
Miscellaneous	..	..	..	114,599	138,749	169,899
Total	..	..	..	1,733,074	1,884,056	1,784,394
Services rendered (other than Business Undertakings)				370,762	328,501	305,674
General Miscellaneous	..	..	..	284,105	342,746	348,475
Total Governmental	..	..	..	6,428,487	6,958,959	7,107,448
<i>Business Undertakings of the State.</i>						
Receipts, Corporate Bodies—						
Railways and Tramways	..	..	..	5,051,953	5,596,428	5,978,060
Sydney Harbour Trust	..	..	..	270,689	298,037	327,579
Metropolitan Board of Water Supply and Sewerage	..	..	..	492,196	496,794	504,092
Hunter District Water Supply and Sewerage	..	..	..	89,757	42,217	48,584
Total Business Undertakings	..	..	..	5,854,595	6,433,476	6,853,315
Grand Total	..	..	..	12,283,082	13,392,435	13,960,763

EXPENDITURE.		1905-6.	1906-7.	1907-8.
<b>Governmental—</b>		£	£	£
Interest on Public Debt and on Funds in temporary possession of the Government (excluding proportion chargeable to the four corporate bodies)		988,398	907,026	730,048
Old-age and Invalidity Pensions and Administration		510,343	515,177	528,131
Other Pensions, Retiring Allowances, &c.		170,885	167,947	205,599
Parliamentary Electorates and Elections Act, including Electoral Office		10,464	20,426	40,966
Parliamentary Allowances and Postage		29,129	29,503	26,295
<b>Local Government—</b>				
Endowments, &c., to Municipalities		18,084	65,805	17,242
Endowments, &c., to Shires			114,494	169,865
Administration, &c.		1,286	12,060	9,980
Agricultural, Pastoral, and Horticultural Societies		8,936	17,390	19,627
Hospitals and Charities (including expenditure on account of bubonic plague)		358,295	328,885	330,114
Lunacy, including Master-in-Lunacy		135,967	135,728	144,523
Public Instruction, including Reformatories and Grants to Educational and Scientific Institutions		938,640	946,044	1,038,620
All other Services of the State		2,685,745	2,542,190	2,350,569
<b>Total Governmental</b>		£ 5,705,372	5,802,705	5,621,574
<i>Business Undertakings of the State.</i>				
<b>Working Expenses—</b>				
Railways and Tramways		2,972,473	3,221,145	3,503,905
Sydney Harbour Trust		80,304	82,764	90,836
Metropolitan Board of Water Supply and Sewerage		120,859	127,419	139,896
Hunter District Board of Water Supply and Sewerage		11,180	12,916	14,721
		3,184,816	3,444,244	3,749,358
<b>Interest on Capital—</b>				
Railways and Tramways		1,643,832	1,717,378	1,781,153
Sydney Harbour Trust		180,951	181,581	187,907
Metropolitan Board of Water Supply and Sewerage		298,697	317,150	331,172
Hunter District Board of Water Supply and Sewerage		13,180	13,648	18,284
		2,136,660	2,229,707	2,318,516
<b>Total Business Undertakings</b>		£ 5,321,476	5,673,951	6,067,874
<b>Sinking Funds Instalments—Total</b>		360,016	405,090	406,145
<b>Public Works Fund—Transfers in Aid</b>		.....	718,051	1,404,479
<b>Closer Settlement Fund—Transfers in Aid</b>		.....	200,000	200,000
<b>Grand Total</b>		£ 11,386,864	12,799,797	13,700,072

## SOURCES OF REVENUE.

The Revenue is classified under four heads—Taxation, Land Revenue, Receipts for Services Rendered, and General Miscellaneous Receipts. The net revenue falling under each of these four heads and the equivalent per inhabitant during the last ten years are shown below:—

Year ended 30th June.	Taxation.		Land Revenue.		Receipts for Services rendered.		General Miscellaneous Receipts.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.
1899	2,515,231	1 18 0	1,953,074	1 9 7	4,857,186	3 13 5	247,924	0 3 8
1900	2,618,069	1 18 11	2,116,076	1 11 5	4,992,521	3 14 4	247,070	0 3 9
1901	1,980,885	1 9 0	2,066,545	1 10 3	5,316,832	3 17 11	1,248,160	0 18 4
1902	1,108,770	0 16 1	2,001,574	1 9 0	5,025,066	3 12 10	2,371,946	2 1 8
1903	1,108,781	0 15 9	1,805,227	1 5 8	4,807,641	3 8 4	3,674,420	2 10 9
1904	1,100,193	0 15 5	1,860,570	1 6 0	5,012,401	3 10 0	3,275,164	2 5 9
1905	1,114,408	0 15 3	1,761,027	1 4 1	5,355,418	3 13 4	3,106,065	2 2 6
1906	1,297,776	0 17 4	1,733,074	1 3 2	5,954,663	3 19 7	3,297,564	2 4 1
1907	1,381,305	0 18 0	1,884,056	1 4 8	6,463,940	4 4 4	3,663,134	2 7 11
1908	1,077,534	0 13 8	1,784,394	1 2 8	6,831,410	4 6 11	4,967,425	2 14 3

In considering the foregoing figures it must be borne in mind that the receipts from Customs and Excise are included to the 31st December,

1900, the revenue from Posts and Telegraphs to the 28th February, 1901, and from Patents to the 31st May, 1904, only, when these services were taken over by the Commonwealth Government. For the purpose of comparison with previous years, the receipts from Railways and Tramways and the Metropolitan and Hunter District Water Supply and Sewerage Boards are included under the heading "Services rendered," and those from the Sydney Harbour Trust under "General Miscellaneous Receipts." The general miscellaneous receipts, however, for the period 1901 to 1908, include the balance of revenue collected within New South Wales by the Commonwealth Government and returned to the State.

## TAXATION.

License Fees, Land and Income Taxes, and Stamp Duties represent the various forms of taxation in force in the State. In the subjoined statement the revenue derived from each source during the period 1906-1908 is shown :—

Head of Revenue.	1905-6.	1906-7.	1907-8.
<i>Indirect Taxation—</i>			
Licenses :—	£	£	£
To retail fermented and spirituous liquors... ..	93,116	87,043	86,566
Other ... ..	28,797	33,031	32,195
Total, Licenses ... ..	121,913	120,074	118,761
<i>Direct Taxation—</i>			
Income Tax ... ..	276,299	292,523	223,856
Land Tax ... ..	336,785	351,038	184,208
Total, Land and Income Tax... ..	613,084	643,561	408,064
<i>Stamp Duties :—</i>			
Impressed and adhesive stamps ... ..	250,747	308,302	222,285
Probate, administration, and settlement duty ... ..	293,653	289,901	310,704
Other ... ..	45,494	51,678	73,545
Total, Stamp Duties ... ..	589,894	649,881	606,534
Gross Revenue from Taxation ... ..	1,324,891	1,413,516	1,133,359
Refunds ... ..	27,115	32,211	55,825
Net Revenue from Taxation ... ..	1,297,776	1,381,305	1,077,534

The control of Customs and Excise having passed to the Commonwealth Government on the 1st January, 1901, the foregoing statement does not include any figures relating to the taxation thereunder. In a publication of this character, however, it is desirable that the actual amount to which the people of the State are subjected by way of taxation, whether direct

or indirect, should be clearly set forth. In the following statement is shown in detail the net revenue derivable from each source of taxation for the decennial period ended 30th June, 1908, after deducting refunds, but not allowing for cost of collection :—

Year ended 30th June.	Indirect Taxation.			Direct Taxation.			Total Taxation.
	Customs.	Excise.	Other.	Income Tax.	Land Tax.	Stamp Duties.	
	£	£	£	£	£	£	£
1899	1,293,769	315,090	121,186	171,272	253,901	360,013	2,515,231
1900	1,398,105	338,272	120,293	166,051	286,226	309,116	2,618,069
1901	1,574,592	383,752	123,527	205,304	288,369	424,349	2,999,893
1902	2,324,000	488,732	124,438	190,315	301,981	492,036	3,921,502
1903	2,861,710	617,032	122,409	199,159	314,104	473,109	4,587,523
1904	2,604,048	625,738	122,137	193,240	322,246	462,570	4,329,979
1905	2,390,735	642,882	122,606	195,252	323,267	473,283	4,148,025
1906	2,563,552	670,370	121,887	266,233	329,998	580,158	4,531,698
1907	2,845,786	727,527	118,819	283,422	345,497	633,567	4,954,618
1908	3,672,072	842,590	118,120	215,283	178,889	565,242	5,592,196

A marked increase in the aggregate amount of taxation is disclosed in the foregoing table, ranging as it does from £2,515,231 in the opening year of the period to £5,592,196 in the closing year. The imposition of uniform customs and excise duties by the Commonwealth Parliament from the 9th October, 1901, largely contributed to this increase, and in the last year there was a further increase in Customs collections, due to the introduction of an amended tariff, as from 8th August, 1907, by which duties in most instances were increased largely, as compared with the tariff of 1901.

There was a noticeable decrease, however, in the revenue derived from Income, Land, and Stamp Duty Taxation during the year ended 30th June, 1908. This was due to amending legislation under Acts Nos. 7 and 8 of 1907, so far as Income Tax and Stamp Duties are concerned, whereby, from the 1st January, 1908, any income won by personal exertion, up to £1,000 a year, is exempt from direct taxation. Stamp duties on bills of exchange, promissory notes, drafts, and receipts have been repealed. The decline in revenue from land tax during 1908 is attributable to the operation of the Taxation Amending Acts of 1905 and 1906, which provide for the allotment of Shires and Municipalities (with the exception of the City of Sydney) of land taxation collected within their area. These Taxation Amending Acts are a necessary corollary to the Local Government Extension Act of 1906.

The figures would be incomplete without corresponding information respecting the taxation per head of population, which is set forth hereunder :—

Year ended 30th June.	Indirect Taxation.			Direct Taxation.			Total Taxation.
	Customs.	Excise.	Other.	Income Tax.	Land Tax.	Stamp Duties.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1899	0 19 7	0 4 9	0 1 10	0 2 7	0 3 10	0 5 5	1 18 0
1900	1 0 10	0 5 0	0 1 10	0 2 5	0 4 3	0 4 7	1 18 11
1901	1 3 1	0 5 8	0 1 10	0 3 0	0 4 3	0 6 2	2 4 0
1902	1 13 8	0 7 1	0 1 10	0 2 9	0 4 4	0 7 2	2 16 10
1903	2 0 8	0 8 9	0 1 9	0 2 10	0 4 5	0 6 9	3 5 2
1904	1 16 4	0 8 9	0 1 9	0 2 8	0 4 6	0 6 6	3 0 6
1905	1 12 10	0 8 10	0 1 8	0 2 8	0 4 5	0 6 6	2 16 11
1906	1 14 4	0 9 0	0 1 7	0 3 7	0 4 5	0 7 9	3 0 8
1907	1 17 2	0 9 6	0 1 7	0 3 8	0 4 6	0 8 3	3 4 8
1908	2 6 8	0 10 8	0 1 6	0 2 9	0 2 3	0 7 2	3 11 0

The receipts from licenses show very little fluctuation from year to year, although the receipts from licenses to retail fermented and spirituous liquors, &c., have declined during the last two years, the result, apparently, of the influence of local option. The amount received during the year ended 30th June, 1908, under the different heads, was as follows:—

Licenses.	Amount.	Licenses.	Amount.
	£		£
Wholesale spirit dealers ... ..	5,610	Explosives Act of 1905... ..	1,078
To retail fermented and spirituous liquors, Colonial wine, cider, and perry ... ..	86,566	Sale of tobacco and cigars ... ..	3,300
Billiard and bagatelle ... ..	7,338	Metropolitan Traffic Act ... ..	2,893
Auctioneers ... ..	5,878	Other ... ..	2,840
Hawkers, pedlars, and pawn- brokers ... ..	3,258		118,761
		Refunds ... ..	641
		Total net Receipts ...£	118,120

The receipts by the Mines Department from licenses, and from those issued under the Fisheries Department, are not included in the table.

#### LAND AND INCOME TAXATION.

The land tax of the State is levied on the unimproved value at the rate of 1d. in the £. A sum of £240 is allowed by way of exemption, and where the unimproved value is in excess of that sum a reduction equal to the exemption is made; but where several blocks of land within the State are held by a person or company, only one amount of £240 may be deducted from the aggregate unimproved value. In cases where land is mortgaged, the mortgagor is permitted to deduct from the tax payable a sum equal to the income-tax paid by the mortgagee on the interest derived from the mortgage of the whole property, including improvements. The lands exempt from taxation comprise Crown lands not subject to the right of purchase, or held under special or conditional lease, or as home-stead selections; other lands vested in His Majesty, or His representative; lands vested in the Railway Commissioners; lands belonging to or vested in local authorities; public roads, reserves, parks, cemeteries, and commons; lands occupied as public pounds, or used exclusively for or in connection with public hospitals, benevolent institutions, and other public charities, churches and chapels, the University and its affiliated colleges, the Sydney Grammar School, and mechanics' institutes and schools of art; and lands dedicated to and vested in trustees and used for zoological, agricultural, pastoral, or horticultural show purposes, or for other public or scientific purposes.

Under the Local Government Act, 1906, when the Council of a shire or municipality makes and levies a general rate of not less than 1d. in the £ on the unimproved value of land within its area, land tax ceases to be collected by the State therein. A similar provision now extends to the City of Sydney under the operation of the "Sydney Corporation (Amendment) Act, 1908."

An income-tax of 6d. in the £ is imposed upon so much of every income as may be in excess of £1,000, if the income is derived by personal exertion, otherwise the exemption is only £200. Incomes are altogether exempt which are derived from the ownership or use or cultivation of land upon which land tax is payable. The exemptions include the revenues of local authorities, the income of life assurance societies, and of other societies and companies not carrying on business for purposes of profit or gain, and not being income derived from mortgages; the

dividends and profits of the Savings Bank of New South Wales and the Government Savings Bank; the funds and income of registered friendly societies and trades unions; the incomes and revenues of all ecclesiastical, charitable, and educational institutions of a public character; and income accruing to foreign investors from Government Stock. The regulations provide that, in the case of every company, its income shall be taken as the income of the company in New South Wales and from investments in the State. Public companies are not allowed the exemption of £200.

The variations in regard to the number and amount of incomes liable to taxation are shown in the following table, which relates to the last ten years. The first year for which the information is available is 1899:—

Year.	Number of Incomes.	Net Income.	Year.	Number of Incomes.	Net Income.
		£			£
1899	19,775	11,123,343	1904	22,299	12,482,094
1900	20,051	12,140,569	1905	22,814	13,769,828
1901	19,991	12,065,842	1906	23,832	14,937,906
1902	20,299	12,127,129	1907	24,091	16,410,484
1903	22,234	13,415,760	1908	5,591	14,014,275

The number of incomes taxed in 1908 is very much reduced, for the reason given above. The figures quoted in the statement refer only to incomes over £1,000.

A distribution of the incomes subject to taxation according to the amounts taxable is set forth in the following statement. The particulars are based on the experience of the nine years ended 30th June, 1907, the last year, 1908, being excluded, as the source of taxation was restricted considerably. These, however, represent only a portion of the incomes derived from New South Wales, as incomes derived from land, or the use and occupancy of land, are not taxable. The net earnings are given in the table:—

Categories.	Average of Nine Years.		Proportion in each category.	
	Number of Incomes.	Amount of Incomes.	Of Number of Incomes.	Of Amount of Incomes.
		£	per cent.	per cent.
£200 and under £250...	6,371	1,430,269	29·60	11·00
250 „ 300...	4,074	1,109,310	18·93	8·54
300 „ 400...	4,140	1,416,527	19·23	10·90
400 „ 500...	2,028	904,974	9·42	6·96
500 „ 700...	1,949	1,126,764	9·06	8·67
700 „ 1,000...	1,200	984,712	5·57	7·58
1,000 „ 1,200...	392	426,930	1·82	3·29
1,200 „ 2,000...	708	1,068,940	3·29	8·23
2,000 „ 5,000...	462	1,354,765	2·15	10·43
5,000 „ 10,000...	122	819,303	0·57	6·31
10,000 „ 20,000...	47	648,381	0·22	4·95
20,000 and upwards .....	31	1,707,889	0·14	13·14
Total .....	21,524	12,993,764	100·00	100·00

The revenue from land and income taxes since 1896, the year in which they were first imposed, is shown hereunder. The amounts exclude refunds rendered necessary through correction of errors by the taxpayer or adjustments by the Department, but include refunds brought about through the income of the year of assessment falling short of the amount of income of the preceding year on which the assessment was made; a provision which was repealed by the "Land and Income Tax Amendment Act, 1904"—

Year.	Land Tax.	Income Tax.	Year.	Land Tax.	Income Tax.
	£	£		£	£
1896	.. .. .	27,658	1903	314,104	214,686
1897	139,079	295,537	1904	322,246	211,831
1898	364,131	166,395	1905	323,267	195,252
1899	253,901	178,032	1906	329,998	266,233
1900	286,227	183,460	1907	345,497	283,422
1901	288,369	215,893	1908	178,889	215,283
1902	301,981	203,625			

The fluctuations shown in the first three years are due to the difficulties inseparable from the introduction of a system of direct taxation; the returns for 1899 and subsequent years, however, are under normal conditions, which have been varied during the last year, however, as already shown, by the increased exemption for the majority of taxpayers, in the case of the income tax, and by the diversion to shires and municipalities of the land tax.

#### LAND REVENUE.

The receipts from the sale and occupation of Crown land are treated as public income in this State, a practice which also obtains in the other States of Australia. While the proceeds from occupation, being rent, can be reasonably regarded as an item of revenue, the inclusion of the proceeds of auction, conditional purchase, and other classes of sale in the ordinary revenue is open to serious objection. It has been urged in justification of the course that the sums so obtained have enabled the Government either to construct works, which enhance the value of the remaining public lands and facilitate settlement, or to endow municipalities, and thus enable them to carry out local works. Under the Act passed in 1906, instituting the Public Works Fund previously mentioned, two-thirds of the net proceeds of the sale of Crown Lands, less 20 per cent., are paid to that fund.

The revenue derived from lands may be grouped under three main heads—(a) auction sales and other forms of unconditional sale; (b) conditional sales or lands disposed of under the system of deferred payments; (c) rents from pastoral, mining, and other classes of occupation. The first two sources have been amalgamated under the head of Alienation; while the last is classed as Occupation.

More than half the annual receipts from land are obtained from alienation, as will be seen from the following table, which gives in detail the revenue from 1906 to 1908, but as about 40 per cent. of the amounts shown as instalments and interest represents interest on balances of conditional

purchases outstanding, to that extent the receipts from sales may be legitimately viewed as income :—

Head of Revenue.	1905-6.	1906-7.	1907-8.
<i>Alienation—</i>			
Sales, etc. :—	£	£	£
Auction sales ... ..	82,953	90,367	90,986
Other ... ..	12,629	14,413	10,048
Total ... ..	95,582	104,780	101,034
<i>Conditional Purchases :—</i>			
Deposits and improvements... ..	58,320	72,082	78,866
Instalments and interest ... ..	709,003	649,440	579,161
Interest (under Act of 1861) ... ..	32,068	33,036	25,756
Balances ... ..	145,691	228,305	156,531
Homestead Selections ... ..	57,917	66,295	75,179
Total ... ..	1,002,999	1,049,158	915,493
Total, Alienation... ..	1,098,581	1,153,938	1,016,527
<i>Occupation—</i>			
Pastoral :—			
Pastoral leases ... ..	2,974	4,420	2,779
Conditional leases ... ..	193,557	202,450	206,016
Occupation licenses ... ..	55,444	47,879	40,484
Homestead leases ... ..	4,027	5,038	4,498
Annual leases ... ..	45,075	45,343	48,477
Settlement leases ... ..	87,763	100,381	103,120
Improvement leases ... ..	61,376	58,151	49,018
Western Land Division leases ... ..	31,544	50,626	65,521
Other leases ... ..	16,715	25,058	29,332
Total ... ..	498,475	539,346	549,245
<i>Mining—</i>			
Mineral leases .. ..	17,886	24,924	19,142
Leases of auriferous lands ... ..	6,766	6,342	2,174
Miners' rights... ..	3,700	4,018	3,636
Royalty on minerals ... ..	46,272	58,671	69,912
Other ... ..	12,984	13,770	12,004
Total ... ..	87,608	107,725	106,868
Total, Occupation ... ..	586,083	647,071	656,113
<i>Miscellaneous Land Receipts—</i>			
Survey fees ... ..	46,797	49,558	50,456
Rents, special objects ... ..	24,871	30,570	33,428
Timber licenses, royalty, etc. ... ..	40,710	47,265	54,205
Quit rents and other receipts ... ..	23,558	30,969	49,979
Total ... ..	135,936	158,362	188,068
Gross Revenue from Lands ... ..	1,820,600	1,959,371	1,860,708
Refunds ... ..	87,526	75,315	76,314
Net Revenue from Lands ... ..	1,733,074	1,884,056	1,784,394

The revenue from land sales has declined year by year, both absolutely and as compared with population. The revenue from this source is now some £1,320,000 less than was the case in 1881. In regard to occupation, a different condition of things is disclosed; the gross receipts in 1907-8 totalled £793,725, or an increase of £456,075 as compared with 1881.

The gross revenue derived from alienation and occupation, and the gross and net land revenue, from 1899 to 1908, were as follow:—

Year ended 30th June.	Alienation.		Occupation.		Gross Revenue from Lands.	Refunds.	Net Revenue from Lands.
	Sales, etc.	Conditional Purchases. *	Pastoral. †	Mining, etc. ‡			
	£	£	£	£	£	£	£
1899	108,960	1,140,240	702,123	58,187	2,009,510	56,436	1,953,074
1900	127,829	1,227,870	737,114	88,153	2,180,966	64,890	2,116,076
1901	135,046	1,234,172	679,315	74,830	2,123,363	56,818	2,066,545
1902	120,202	1,173,090	694,099	70,286	2,057,677	56,103	2,001,574
1903	119,770	1,008,998	658,696	83,227	1,870,691	65,464	1,805,227
1904	117,518	1,058,345	661,904	98,194	1,935,961	75,391	1,860,570
1905	102,316	1,005,839	636,057	101,255	1,845,467	84,440	1,761,027
1906	95,582	1,049,796	546,904	128,318	1,820,600	87,526	1,733,074
1907	104,780	1,098,716	600,885	154,990	1,959,371	75,315	1,884,056
1908	101,034	965,949	632,652	161,073	1,860,708	76,314	1,784,394

\* Includes Survey Fees. † Includes all Miscellaneous Receipts except Survey Fees and Timber Licenses.  
‡ Includes Timber Licenses.

The land policy of the State, though largely connected with its finances, has been more fully discussed in the part of this work dealing with land settlement.

The reappraisement of the leases in the Western Division, under the provisions of the Western Lands Act caused a considerable shrinkage in revenue, the rentals of the leases determined to the 30th June, 1908, showing a reduction of £107,089 over those previously in force. Radical reductions were necessary to prevent the abandonment of enormous tracts of country, which would thereby become worse than non-productive, inasmuch as they would form breeding-grounds for rabbits and other noxious animals. The loss of revenue, however, will be counterbalanced by the benefit resulting from the occupation of this large territory, under conditions which will encourage enterprise and the expenditure of capital in the proper development of the country, and in effectually coping with the rabbit scourge.

#### RECEIPTS FOR SERVICES RENDERED.

The receipts from the Railways and Tramways and from Water Supply and Sewerage comprise the greater part of the revenue received from services, the balance under this heading being made up chiefly of dues and fees of various kinds.

After making provision for working expenses and interest on loan capital, the Railways and Tramways, during the financial year just closed, exhibited a surplus of £693,002, while the operations of the Metropolitan Board of Water Supply and Sewerage and the Hunter District Water Supply and Sewerage Board show a surplus of £33,024 and £10,579

respectively. The gross receipts under each head during the period 1906-8 were as follow:—

Service.	1905-6.	1906-7.	1907-8.
	£	£	£
Railways .....	4,259,520	4,730,203	5,044,791
Tramways .....	854,977	910,323	1,020,727
Water Supply and Sewerage—			
Metropolitan—Water Supply .....	272,693	277,829	287,442
Sewerage .....	220,313	219,660	217,151
Hunter District Water Supply .....	39,806	42,253	45,363
Public school fees .....	78,445	34,422	4,716
Pilotage, harbour and light rates, and fees .....	82,526	94,470	106,297
Mint receipts .....	20,482	17,639	10,261
Miscellaneous services .....	189,906	187,129	186,704
Gross revenue from Services .....	6,018,668	6,513,928	6,923,452
Refunds .....	64,000	49,988	92,042
Net revenue from Services .....	5,954,668	6,463,940	6,831,410

The gross revenue derived annually from each of the principal services, and the net revenue from all sources during the last ten years were as shown in the following statement:—

Year ended 30th June.	Railways and Tramways.	Posts and Telegraphs.	Water Supply and Sewerage (Metropolitan and Hunter).	Other Services.	Gross Revenue from Services.	Refunds.	Net Revenue from Services.
	£	£	£	£	£	£	£
1899	3,568,658	775,102	322,244	267,269	4,933,273	76,087	4,857,186
1900	3,640,450	819,460	350,897	278,970	5,089,777	97,256	4,992,521
1901	4,158,016	580,539	355,441	306,747	5,400,743	83,911	5,316,832
1902	4,390,951	.....	377,019	324,661	5,092,631	67,565	5,025,066
1903	4,197,789	.....	409,019	320,008	4,926,816	119,175	4,807,641
1904	4,322,162	.....	418,087	331,742	5,071,991	59,590	5,012,401
1905	4,556,541	.....	513,940	320,712	5,391,193	35,775	5,355,418
1906	5,114,497	.....	532,812	371,359	6,018,668	64,000	5,954,668
1907	5,640,526	.....	539,742	333,660	6,513,928	49,988	6,463,940
1908	6,065,518	.....	549,956	307,978	6,923,452	92,042	6,831,410

The net revenue just given should be read with the rates per inhabitant for the same years, which will be found on a previous page. The revenue of the Sydney Harbour Trust is not included in the above table but under "General Miscellaneous Receipts." The income derived by the Government from services has with little interruption, been steadily increasing; this, however, is only what would naturally be expected in a growing community. It will be seen from the table giving the rates per head that, notwithstanding the transfer of the Post Office and Telegraph Department to Federal control on the 1st March, 1901, the rate per head in 1907-8 was £4 6s. 11d., as compared with £3 13s. 5d. in 1898-9. The increase in the return from services is undoubtedly largely due to the construction of railways and tramways, from which nearly 88 per cent. of such revenue was derived during 1907-8. Compared with the population, the income derived from the services of the State is enormous.

With the exception of 81½ miles of private railways, 6¾ miles of private tramways, and a number of short lines in mining districts connecting the mines with the main lines, all railways and tramways within the State belong to, and are controlled by, the Government.

The collections under the head of Water Supply and Sewerage include the returns of the Boards operating in the metropolitan area and in the Hunter River district. These Boards form part of the local government scheme, and it is an open question whether the receipts and expenditure connected with them should be included in the general account. The loans from which the works have been constructed, however, form part of the public debt; and the interest payable is, therefore, rightly included as an item of the general accounts.

The balance of the revenue collected under the head of services consists of fees of office, public school fees, pilotage and harbour dues, and other items. The revenue derived from these services, however, is merely nominal, as the cost of the work performed in nearly every case far exceeds the receipts. The gross amount received under each head during the year ended 30th June, 1908, was:—

	£
Fees of office ... ..	112,663
Public school fees ... ..	4,716
Pilotage and harbour dues ... ..	106,297
Other fees ... ..	84,392
<b>Total</b> ... ..	<b>£307,978</b>

Up to the 30th June, 1906, public school fees amounted annually to about £80,000. Since October, 1906, fees in primary and superior public schools have been abolished under the "Free Education Act, 1906," and from that date the revenue comprises only the fees from High Schools and from the Training College, and is inconsiderable in amount.

#### GENERAL MISCELLANEOUS RECEIPTS.

All items which cannot rightly be placed under one of the three great classes are grouped under the heading of "General Miscellaneous Receipts," the chief of which are "Rents, exclusive of land," "Forfeitures," "Balances, Transfers, and Repayments," and similar accounts. For the last eight years also the figures include collections in connection with the Sydney Harbour Trust and the Darling Harbour resumptions, as well as balances of revenue collected by the Commonwealth and returned to the State. The gross amount received under each of the main sub-heads, and the gross and net revenue received under the general head since 1899 are shown in the following statement:—

Year ended 30th June.	Rents, exclusive of Land.	Balances, Transfers, and Repayments.	Revenue collected by the Commonwealth and returned to the State.	Other Miscellaneous Receipts.	Gross Revenue from Miscellaneous Receipts.	Refunds.	Net Revenue from General Miscellaneous Receipts.
	£	£	£	£	£	£	£
1899	93,394	32,131	.....	126,175	251,700	3,776	247,924
1900	80,739	44,112	.....	131,586	256,437	9,367	247,070
1901	227,774	57,625	883,273	99,279	1,267,951	19,791	1,248,160
1902	303,732	58,053	2,385,905	131,273	2,878,963	7,017	2,871,946
1903	344,456	51,653	3,053,133	140,248	3,589,492	15,072	3,574,420
1904	345,610	112,610	2,683,417	158,104	3,299,741	24,577	3,275,164
1905	339,219	97,583	2,529,070	146,544	3,112,416	6,351	3,106,065
1906	344,445	99,534	2,742,770	120,563	3,307,312	9,748	3,297,564
1907	365,460	26,364	3,022,351	269,390	3,683,565	20,431	3,663,134
1908	390,158	41,305	3,591,371	255,004	4,277,838	10,413	4,267,425

Since 1901 the collections in connection with the Sydney Harbour Trust and the Darling Harbour resumptions have been included under the heading of "Rents exclusive of Land."

## HEADS OF EXPENDITURE.

The following table gives the net expenditure under the more important heads since 1899. The amounts given herewith are exclusive of transactions under "Advances made," which, as mentioned previously, are not items of expenditure in the proper sense of the term:—

Year ended 30th June.	Net Expenditure on—						
	Railways and Tramways.	Post and Telegraphs	Water Supply and Sewerage (Metropolitan and Hunter).	Public Instruction.	Interest on Public Debt (Funded and Unfunded).	Other Services.	Total Net Expenditure.
	£	£	£	£	£	£	£
1899	1,983,987	695,262	90,097	749,865	2,292,955	3,750,573	9,562,739
1900	2,102,793	726,569	89,627	769,572	2,310,271	4,087,354	10,086,186
1901	2,474,376	527,254	98,921	785,279	2,346,852	4,497,059	10,729,741
1902	2,806,161	.....	115,193	856,622	2,498,750	4,731,447	11,008,173
1903	2,948,554	.....	126,432	899,918	2,619,766	4,872,565	11,467,235
1904	2,921,026	.....	121,570	905,975	2,745,348	4,625,969	11,319,888
1905	2,917,702	.....	136,279	912,832	2,856,872	4,371,390	11,195,075
1906	2,972,473	.. ...	132,039	928,884	2,941,059	4,412,409	11,386,864
1907	3,221,145	.....	140,335	946,044	3,136,733	5,355,540	12,799,797
1908	3,503,905	.....	154,617	1,038,620	3,048,559	5,954,371	13,700,072

The annual expenditure for the services named has, generally speaking, increased; the revenue has likewise grown, but not in a corresponding ratio. To establish the relative position of each, it will be necessary to place the accounts side by side. The figures given for the public debt apply only to interest expenditure; the amount paid for redemptions, which in point of volume is unimportant, and the expenditure incurred in the management and inscription of stock in London, including the payment of dividends, are included under the head of "Other Services."

## EXPENSES OF GENERAL GOVERNMENT.

In the figures already given regarding the revenue of the State, it will have been noticed that the amount received on account of the business undertakings of the State—that is, the earnings of the railways, the tramways, the boards of water supply and sewerage, and the Sydney Harbour Trust—are included in the general revenue. This is almost a matter of necessity so long as the expenditure includes interest on the public debt incurred to promote these services. In consequence of this system the annual cost of maintaining the services referred to is also included in the expenditure. The figures given in the table above do not admit of a ready distinction being made between these two kinds of expenditure; but as the information is necessary for the right understanding of the public accounts, the following statement has been compiled. It shows the progress of expenditure as classified under two headings—ordinary expenditure of general government, including interest on capital liability of services connected therewith; and expenditure on services practically outside the administration of general government, such as railways, tramways, water supply and sewerage, and the Sydney Harbour Trust, and the interest on capital liability of the services

enumerated. The figures for the five years ended 30th June, 1908, and the rates per inhabitant, are as follow :—

Year ended 30th June	Total Net Expenditure.							
	Governmental.				Business Undertakings.			
	Public Instruction.	Interest on Public Debt.	Other Services.	Total.	Railways and Tramways.	Water Supply and Sewerage.	Sydney Harbour Trust.	Total.
	£	£	£	£	£	£	£	£
1904	913,197	831,527	4,308,980	6,053,704	5,266,184			5,266,184
1905	916,071	883,236	4,096,160	5,895,467	5,299,608			5,299,608
1906	938,640	938,398	4,188,350	6,065,388	4,616,305	443,916	261,255	5,321,476
1907	946,044	907,026	5,272,776	7,125,846	4,938,523	471,133	264,295	5,673,951
1908	1,038,620	730,043	5,863,535	7,632,198	5,285,058	504,073	278,743	6,067,874

## Net Expenditure per Inhabitant.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1904	0 12 9	0 11 7	3 0 3	4 4 7	3 13 7			3 13 7
1905	0 12 7	0 12 1	2 16 0	4 0 8	3 12 6			3 12 6
1906	0 12 6	0 12 7	2 16 0	4 1 1	3 1 9	0 5 11	0 3 6	3 11 2
1907	0 12 4	0 11 10	3 8 11	4 13 1	3 4 6	0 6 2	0 3 6	3 14 2
1908	0 13 3	0 9 3	3 14 6	4 17 0	3 7 3	0 6 4	0 3 7	3 17 2

For the years 1904 and 1905, the figures for each department under Business Undertakings cannot be given exactly as during those years the exact proportion of the Public Debt attributable to each service had not been determined.

Under the heading of the expenses of general government are included civil and legal expenditure, and the cost of Education and such public works as are constructed out of the ordinary revenue, as also the interest payable where the proceeds of loans have been used to defray the cost of their construction, together with the sinking fund instalments. The expenditure per head of population on account of some of these services, viz., educational and others of less importance, has either been stationary or declining until last year, when the cost of public instruction increased both in the total and per inhabitant more than at any other time during the quinquennium. The increase in other services during 1908, as previously explained, is due to the transfers from the Consolidated Revenue in aid of the Public Works and Closer Settlement Funds, the sum involved being £1,604,479, or £1 0s. 5d. per head. Excluding this amount, the total governmental expenditure was £3 16s. 7d. per head, or lower than for any other of the last five years.

The general tendency in progressive communities is for the cost of government per inhabitant to decline as population increases; the operation of this law is traceable in the figures just given.

## TRUST FUNDS AND SPECIAL DEPOSITS.

The Trust Funds and Special Deposits form a very important division of the public finances, not only from the nature of the transactions and the volume of accumulated funds, but also by reason of the manner in which the accounts are operated upon in conjunction with the general finances

of the State. To show the growing importance of the Account, the following table has been compiled. In 1871 the amount at credit was £213,340; in 1886, £2,702,486; and in 1906, £10,007,626.

Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£
1871	213,340	*1896	7,657,741	*1904	10,191,160
1876	854,571	*1900	10,103,940	*1905	10,562,513
1881	1,671,183	*1901	10,823,128	*1906	10,007,626
1886	2,702,486	*1902	11,720,889	*1907	2,359,665
1891	4,997,055	*1903	10,564,026	*1908	3,022,138

\* Year ended 30th June.

The decreased amounts shown for the last two years are due to the removal to the control of the Savings Bank Commissioners of the securities belonging to the Government Savings Bank. As these securities are no longer vested in the Colonial Treasurer they are excluded from the Public Accounts. The Treasurer still holds certain balances, however, which belong to that bank, namely, the moneys which were not invested at the time the securities were transferred to the Commissioners, the amount so held at 30th June, 1908, being £1,145,292.

The Trust Funds subject to the Audit Act of 1902 are divided into two classes, viz.:—Trust Accounts and Special Deposits. The former is defined by the Act to mean funds of which the Treasurer is, by statutory obligation, a trustee and custodian, and moneys that have been placed to the Trust Fund under previous Audit Acts, or which may be paid thereto by the authority of the existing Act. The Special Deposits Account consists of sums deposited with the Treasurer for Store Accounts, Advance Accounts, and moneys not included in the Consolidated Revenue Account, General Loan Account, or Trust Account, which the Treasurer may direct to be placed to the Special Deposits Account.

The Special Trust Accounts consist of funds established by statute for particular objects, the principal being the Supreme Court Accounts and Sinking Funds for extinction of indebtedness on works not of a reproductive character. These accounts are operated on directly by the officers in charge of the departments, and are not directly subject to the provisions of the Audit Act, but, for general purposes, they form part of the Public Banking Account. Other Special Accounts are the Closer Settlement Fund and Public Works Fund.

The total under all these headings on the 30th June, 1908, was £3,022,138, of which £1,145,292 were classed as Trust Accounts, £490,585 as Special Deposits, and £1,386,261 as Special Trust Accounts. The funds of the Government Savings Bank which have not been handed over to the Commissioners of that institution account for the whole of the first-mentioned item. Of the Special Deposits, the largest items were:—State Debt Commissioners' Trust Account, £88,553; Railway Store Account, £86,876; Public Works Department Store Advance Account, £84,775; Fixed Deposits Account, £20,300; and Sundry Deposits Account, £98,154. The balance of £111,927 comprises items which are each under £20,000 in amount. The Supreme Court moneys

aggregated £231,565 of the total Special Trust Accounts, the balance consisting of the Closer Settlement Account, £410,004, and the Public Works Account, £744,692.

The existence of a large account upon which the Treasury was free to operate has been of no little assistance to the Consolidated Revenue in times past; in fact, the Trust Funds formed a strong reserve on which the Government fell back in time of need. The great bulk of the funds bore interest, whether invested or not; but the power to use those funds enabled the Government to effect a saving of interest, as similar accommodation from the banks could not be obtained under such favourable conditions. At the same time, the existence of the funds has been a strong temptation to extravagance, as without them it would not have been possible to cope with the large excess of expenditure over revenue that was so marked a feature of public finance between 1885 and 1905.

Excluding the sums to the credit of the Public Works and Closer Settlement Funds, there was a sum of £1,867,442 at credit of the Trust Funds on 30th June, 1908. Of this amount £32,833 was invested in securities; £1,459,963 was uninvested, but used in Advances and on Public Account at interest; while the remainder, £374,646, was similarly used, but without interest being paid thereon.

With the exception of the sum deposited in the Treasury by the Savings Bank of New South Wales, which was invested at  $3\frac{1}{2}$ ,  $3\frac{3}{4}$ , and 4 per cent., a general rate of 4 per cent. was allowed to 31st December, 1894, on all funds entitled to interest. On the 1st January, 1895, the rate was reduced to 3 per cent. on all accounts except those on which the old rates could not be altered till the terms of the existing arrangements had expired, and these rates still continue, with the exception of the sum deposited by the Government Savings Bank, which bears interest at  $3\frac{1}{2}$  per cent., and the Sinking Funds of the Municipal Council of Sydney, the Crown Leases Security Deposit Account, and the other Fixed Deposits which bear interest at 4 per cent.

On the 30th June, 1908, the Trust Funds in the custody of the Colonial Treasurer were held thus:—

	£
In Banks at current account ... ..	2,289,305
In Banks at fixed deposit ... ..	700,000
In New South Wales Funded Stock ... ..	14,500
In miscellaneous securities ... ..	18,333
Total ... ..	£3,022,138

All funds are held at current account, with the exception of £700,000, being portion of the Government Savings Bank Account, of which the sum of £350,000 is invested as a fixed deposit in the Bank of New South Wales at  $1\frac{1}{2}$  per cent., and a similar amount with the Commercial Banking Company of Sydney (Limited) at the same rate of interest. The total amount of interest received by the Treasury during the year ended June, 1908, on Bank deposits and other temporary investments was £64,896, of which part was earned by moneys belonging to the Trust Account.

All Trust Funds under the Audit Act remaining unclaimed for a period of two years, and balances of intestate and probate estates unclaimed after a lapse of six years, are transferred and surrendered to the Consolidated Revenue, and no person can legally claim moneys so vested; nevertheless, the Treasury invariably recognises and pays in all cases where an otherwise valid claim can be shown.

Under the provisions of the "State Debt and Sinking Fund Act, 1904," a Board called the "State Debt Commissioners," was constituted, comprising the State Treasurer, the Chief Justice, the Speaker of the Legislative Assembly, and the Under Secretary to the Treasury, to administer, from the 1st July, 1905, various Trust Accounts and balances at credit of certain Special Accounts. The Sinking Funds created by the Loan Acts of 1894 (No. 2), 1895, 1896, 1897, 1898, and 1899 were also transferred to, and are administered, by the Commissioners.

#### LOAN APPROPRIATIONS.

All items of expenditure to be met by loan are authorised under an Appropriation Act, in the same manner as the ordinary expenditure chargeable to the general revenue, while under the Inscribed Stock Act of 1883 (46 Vic. No. 12), the passing of the Loan Estimates confers the power of raising the money required without the necessity of a special Loan Act. There is a further restriction to the expenditure of money, whether from loans or revenue, in the operation of the Public Works Act of 1888. Under the provisions of this Act, the question of the advisableness of carrying out all works estimated to cost more than £20,000, except those connected with the maintenance of Railways, is referred by resolution of the Legislative Assembly to the Parliamentary Standing Committee appointed during the first Session of each Parliament. The Committee investigates and reports to Parliament, and the Assembly, declares whether it is expedient to carry out the proposed work; if the declaration be favourable, a Bill based thereon must be passed before the authorisation is absolute. The Loan Act of 1908 authorised the raising of a loan of £5,256,521 for services shown in the subjoined table:—

Services.							Total.
							£
Railways	...	...	...	...	...	...	1,105,000
Tramways	...	...	...	...	...	...	185,000
Railways and Tramways—Stores, &c.	...	...	...	...	...	...	50,000
Railway Construction...	...	...	...	...	...	...	319,425
Tramway Construction	...	...	...	...	...	...	231,642
New Street for Tramway purposes	...	...	...	...	...	...	10,000
Sydney Harbour Trust	...	...	...	...	...	...	150,000
Metropolitan Board of Water Supply and Sewerage	...	...	...	...	...	...	223,000
Hunter District Water Supply and Sewerage Board	...	...	...	...	...	...	10,800
Water Supply and Sewerage Construction, including	...	...	...	...	...	...	
Country Towns	...	...	...	...	...	...	375,300
Abattoirs, Homebush Point	...	...	...	...	...	...	30,000
Repayment of Loans	...	...	...	...	...	...	2,566,354
Total	...	...	...	...	...	...	£ 5,256,521

No provision is made for redeeming a portion of the proposed loan by a Sinking Fund. This principle of redemption from revenue was applied, under the Loan Acts of 1894 to 1899, to expenditure on works whose value will disappear by the time the loan, out of the proceeds of which they were constructed, falls due, but was discontinued in the Loan Acts of 1900 to 1906.

The Loan Appropriations in quinquennial periods since 1875 are given in the subjoined table, the amounts proposed to be expended on Public Works being distinguished from those required for redemption of previous loans :—

Year.	Amount authorised—		
	For Public Works and Services.	For Redemption of Loans.	Total.
	£	£	£
1875-9	10,708,768	.....	10,708,768
1880-4	26,457,803	.....	26,457,803
1885-9	11,123,394	2,113,800	13,237,194
1890-4	15,927,993	2,910,800	18,838,793
1895-9	13,661,046	2,275,200	15,936,246
1900-4	17,690,893	2,841,612	20,532,505
1905	968,430	.....	968,430
1906	1,130,800	550,000	1,680,800
1907	2,470,981	1,500,000	3,970,981
1908	2,690,167	2,566,354	5,256,521

Loan Appropriations are invariably in excess of the amount actually required for expenditure; and it has frequently happened that, beyond obtaining Parliamentary sanction, no further action has been taken in regard to loans authorised.

#### LOAN ACCOUNT.

The following figures show the amount of loans raised from the commencement of the Loan Account to the 30th June, 1908, and the proceeds available for expenditure :—

Treasury Bills, Debentures, Inscribed and Funded Stock sold from 1842 to 30th June, 1908	£120,029,343
Discount, interest bonus, and charges	5,698,092
Net amount realised	£114,331,251
Add net amount transferred from Consolidated Revenue to make good amount short-raised	176,767
Add Advances to Settlers in excess of loans floated	258,858
	£114,766,876
Less Treasury Bills in aid of Revenue not placed to Loan Account	4,769,653
Less proceeds of old loans not included in Loan Accounts	724,733
Less Municipal Debentures taken over and still outstanding	57,533
Less amounts over-raised and not placed to Loan Account	48,760
	5,600,679
Sum available for works, &c.	£109,166,197

As the above statement shows, a sum of £120,029,343 has been raised by loan to the 30th June, 1908, in connection with which the discount, interest bonus, and other charges amounted to £5,698,092, leaving £114,331,251 available for expenditure. The effective value of this latter amount was reduced by the sum of £5,600,679 (utilised as shown above), making the net amount available for works, &c., £109,166,197.

Up to the 30th June, 1908, £32,393,517 were redeemed, £7,425,887 being a charge on the Consolidated Revenue, Advances to Settlers Stock being cancelled to the amount of £305,000, and the balance, £24,662,630, representing the proceeds of new loans, leaving £87,635,826 outstanding at the close of the last financial year. The aggregate amount of interest paid by the State on its loans to the 30th June, 1908, was £65,379,921, of which the charge during the last financial year was £2,986,844.

The use to which the aforementioned sum of £109,166,197 was applied is shown in the following table. The sum of £24,662,630 for redemption of loans is included in the total; this amount was not, of course, an item of expenditure, but its inclusion is necessary to fully account for the total of £109,166,197, in which the original loans as well as the redemption loans were included:—

Expended on—	£
Railways...	47,000,224
Tramways .....	4,356,679
Water Supply and Sewerage ..	11,418,688
Water Conservation, Artesian Boring, &c....	1,135,257
Sydney Harbour Trust and Darling Harbour Wharves Resumptions ...	6,315,960
Harbours and Rivers Navigation ...	4,392,542
Public Works and Buildings ...	4,415,965
Roads and Bridges ...	1,801,943
Immigration ...	194,430
Advances to Settlers ...	683,308
Works in Queensland prior to separation ..	49,856
Commonwealth Services ...	3,430,647
	<hr/>
	£85,195,499
Redemptions—	
Loans repaid under various Acts ...	£10,800,630
Treasury Bills for Loan Services repaid ...	13,486,500
Debt due by Territorial Revenue for Immigration ...	375,500
	<hr/>
	24,662,630
	<hr/>
	£109,858,129
Less Debit Balance of Loan Account on 30th June, 1908 ...	691,931
	<hr/>
Total (as shown previously) ...	£109,166,198

The sum actually expended from loans was, therefore, £85,195,499, the balance to make up the total of £109,858,129 being represented by redemptions. The difference of £691,931 over the sum available for expenditure is the amount by which the General Loan Account was overdrawn at the 30th June, 1908. Analysing the above amounts the following shows the allocation of the items of expenditure:—

Reproductive Works ...	88 per cent.
Permanent but non-revenue producing Works...	7 "
Commonwealth Services ...	4 "
Immigration and Works in Queensland prior to separation ...	1 "

The loan expenditure on account of the various services during the last three years has been as follows:—

Head of Service.	1905-6.	1906-7.	1907-8.
	£	£	£
Railways ... ..	479,403	439,449	1,132,689
Tramways ... ..	49,848	.....	230,625
Water Supply and Sewerage—			
Water Supply ... ..	259,050	215,089	176,019
Sewerage ... ..	76,147	115,375	161,250
Water Conservation and Irrigation ... ..	30,245	.....	33,550
Harbours and Rivers Navigation ... ..	256,780	172,410	140,890
Roads and Bridges ... ..	23,800	436	1,690
Public Works, Buildings, &c. ... ..	102,736	91,810	14,563
Advances to Settlers ... ..	84,027	35,685	.....
Roads of access to Crown Lands ... ..	4,966	10,726	671
Promotion of Agriculture ... ..	.....	9,838	.....
Loans to Pastures Protection Boards ... ..	.....	25,733	.....
Abattoirs—Homebush ... ..	.....	.....	85,000
Other Services ... ..	.....	.....	1,202
Total Expenditure on Public Works, &c. £	1,367,022	1,116,551	1,978,149
Less Excess Repayments to Credit of Votes over Expenditure ... ..	.....	22,313	12,820
	£ 1,367,022	1,094,238	1,965,329
Loans repaid by New Loans (including Treasury Bills)	1,835,500	2,077,500	3,617,600
Total ... ..	£ 3,202,522	3,171,738	5,582,929

Most of the foregoing items were for services likely to be permanently revenue-producing, or deemed necessary for the proper development of the State; but there has been some expenditure on works and services for which there will be in a few years no substantial assets remaining. It is intended in future either to pay for such items out of revenue, or, if out of loans, to provide for their ultimate payment out of revenue by means of a sinking fund.

In the early stages of Australasian borrowing the expenditure was moderate, loans were hard to raise, and interest high; but latterly, as the conditions under which loans could be contracted became favourable, especially after 1875, few of the States set any bounds to their requirements. But when every allowance has been made for unwise or improvident expenditure, it will be found that by far the larger portion of the proceeds of loans has been well utilised, and a practical consideration of the conditions which surround Australasian settlement will demonstrate that, on the whole, the construction of these works was justifiable; since apart from the certainty that they will be self-supporting, they have already materially assisted in developing the country's resources, and have largely enhanced the value of the public estate.

The loan expenditure, exclusive of payments on account of redemptions, between 1842 and 1890, thereafter every five years up to 1905, and then annually to 1908, is shown below:—

Year.	During each period.		At the end of each period.	
	Amount.	Per Inhabitant.	Amount.	Per Inhabitant.
	£	£ s. d.	£	£ s. d.
1842-1890	.....	.....	43,955,551	39 3 7
1891-1895	11,683,598	9 18 10	55,639,149	43 17 6
1896-1900	8,832,106	6 15 0	64,471,255	47 7 4
1901-1905	16,297,655	11 12 11	80,768,910	54 12 9
1906	1,367,022	0 18 3	82,135,932	54 4 10
1907	1,094,238	0 14 3	83,230,170	54 7 3
1908	1,965,329	1 5 0	85,195,499	54 3 3

The rate of borrowing which so marked the quinquennium preceding 1905 has been stopped; and loan expenditure will, in the future, be confined mainly to perfecting the various railway systems in operation, and to the gradual extension of the coast lines north and south.

It has been shown that while the public debt of the State on the 30th June, 1908, was £87,635,826, there has been an expenditure of £85,195,499 on public services. The receipts and expenditure in connection with the business undertakings or trading concerns of the State, namely, the Railways and Tramways, the Metropolitan and Hunter District Water and Sewerage Boards, and the Sydney Harbour Trust, for the past five years, are shown below. The transactions of the first year, and partly those of the second, cannot be considered as normal, inasmuch as the greater part of the State, and certainly that portion involving the most vital interests, had not recovered from the effects of the severe drought; and, therefore, not only were the sources of revenue restricted, but the working expenditure necessary to obtain the results secured was greatly increased:—

Year ended 30th June.	Receipts.	Working Expenses.	Amount available to meet Interest on Capital Cost.	Interest Obligations on Capital Cost.	Deficiency.	Excess.
	£	£	£	£	£	£
1904	4,943,130	3,132,636	1,810,494	2,133,548	323,054	.....
1905	5,288,948	3,131,826	2,157,122	2,167,782	10,660	.....
1906	5,851,595	3,184,816	2,669,779	2,136,660	.....	533,116
1907	6,433,476	3,444,244	2,989,232	2,229,707	.....	759,525
1908	6,853,315	3,749,358	3,103,957	2,318,516	.....	785,441

During the last three years there has been a substantial surplus, after meeting the interest, on the capital cost of the above-mentioned undertakings; and during the last two years the net earnings of these bodies have been more than sufficient to pay the interest on the whole public debt of the State.

#### THE PUBLIC DEBT.

The public debt outstanding at each quinquennial period is given in the subjoined table. From 1850 to 1860 the average annual increase of indebtedness was £370,000; from 1860 to 1870, £585,000; from 1870 to 1880, £522,000; from 1880 to 1890, £3,348,000; from 1890 to 1900, £1,695,000; and from 1901 to 1908, £2,787,900:—

Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£
1842	49,500	1865	5,749,630	1890	48,383,333
1845	97,900	1870	9,681,130	*1895	58,220,933
1850	132,500	1875	11,470,637	*1900	65,332,993
1855	1,000,800	1880	14,903,919	*1905	82,321,998
1860	3,830,230	1885	35,564,259	*1908	87,635,826

\* 30th June.

The increase has been most marked since 1880. Between that year and 1885 the indebtedness per head nearly doubled, and between 1885 and 1893 increased by 30 per cent; but between 1893 and 1899 it showed a decrease of £1 1s. per head. During the last ten years it has increased by

36 per cent. The following table, which contains the more important particulars of the public loan accounts, shows the growth of the public debt during the last ten years. The amount of bonds or stock sold has been placed against the year in which the sales were effected, and not, as is the practice of the Treasury, against the year in which they were brought to account:—

Year ended 30th June.	Treasury Bills, Debentures, and Stock at close of each year—						
	Authorised.	Sold.	Redeemed.			Unredeemed (Out-standing Public Debt).	
			From Consolidated Revenue.	By New Loans.	Total.	Total.	Per Inhabitant.
	£	£	£	£	£	£	£ s. d.
1899	94,291,527	79,808,346	4,270,850	11,775,430	16,046,280	63,762,066	47 16 3
1900	101,165,508	81,535,373	4,420,850	11,781,530	16,202,380	65,332,993	48 4 9
1901	107,868,893	84,575,126	4,570,850	12,643,030	17,213,880	67,361,246	49 6 0
1902	111,621,285	90,429,602	4,725,987	14,111,130	18,837,117	71,592,485	51 6 0
1903	120,200,858	97,261,004	4,975,987	14,532,030	19,508,017	77,692,987	54 14 3
1904	123,047,542	100,793,398	5,750,987	15,008,830	20,759,817	80,033,581	55 7 2
1905	125,615,192	105,455,015	6,000,987	17,132,030	23,133,017	82,321,998	55 13 9
1906	128,660,513	110,860,251	6,250,987	18,967,530	25,218,517	85,641,734	56 11 2
1907	130,341,313	113,686,633	6,728,771	21,350,030	28,078,801	85,607,832	55 0 11
1908	139,512,294	120,029,343	7,425,887	24,967,630	32,393,517	87,635,826	55 5 7

The next table shows the annual payments under each head for interest and expenses of the public debt since 1899:—

Year ended 30th June.	Interest.	Redemptions (including premium on purchase of Debentures on account of Railway Loan, 31 Vic. No. 11).	Expenses connected with management of Inscribed Stock, Bank of England.	Commission paid to Financial Agents in England and New South Wales.	Annual Interest and Charges paid.	
					Total.	Per Inhabitant.
	£	£	£	£	£	£ s. d.
1899	2,292,955	255,840	19,076	1,584	2,569,455	1 18 10
1900	2,310,271	264,561	19,206	1,397	2,595,435	1 18 8
1901	2,346,852	269,412	19,207	2,233	2,637,704	1 18 8
1902	2,498,750	274,550	19,250	2,825	2,795,375	2 0 6
1903	2,619,766	369,413	20,211	2,876	3,012,266	2 2 10
1904	2,745,348	369,412	20,637	2,479	3,137,876	2 3 10
1905	2,856,872	319,413	20,640	1,766	3,198,691	2 3 9
1906	2,941,059	360,016	20,643	3,137	3,324,855	2 4 5
1907	3,047,618	400,000	21,143	1,645	3,470,406	2 5 4
1908	2,936,844	400,000	21,143	5,641	3,413,628	2 3 5

At present the net revenue from the public works of the country is derived from railways, tramways, water supply and sewerage, and the Sydney Harbour Trust. The water and sewerage works of the Metropolitan area are not yet completed, and are now self-supporting—that is, the revenue is sufficient to meet the amount required to be expended on account of maintenance, management, depreciation, and interest on

capital liability. The same remarks apply to the works under the control of the Hunter District Board. In connection with these works it must, however, be borne in mind that, in the absence of a complete and compulsory reticulation, there must be a large outlay of capital expenditure on which no return is received.

The public debt is partly funded and partly unfunded, the funded debt comprising debentures, inscribed and funded stocks, and Treasury Bills constituting the unfunded portion. The two classes are defined by the difference in currency, the funded debt being long-dated loans, and the unfunded, short-dated loans. Originally the term "funded" was applied only to interminable stocks, the amount of which, £530,190, is, as compared with the total debt, unimportant; but it is now the practice to apply this term also to redeemable debts. The amount outstanding on the 30th June, 1908, under each class, and the total debt, were as follow:—

Description of Stock.	Amount outstanding, 30th June, 1908.	Annual Interest.	
	£	£	£
<b>Funded Debt—</b>			
Debentures—			
Overdue, or unrepresented, which have ceased to bear interest ... ..	1,350		
Still bearing interest ... ..	8,307,000		332,307
N. S. Wales 4 per cents. (Interminable) ... ..	530,190		21,208
„ Funded Stock ... ..	18,623,500		657,345
„ 1924 Stock ... ..	198,065		5,942
„ 1925 „ ... ..	222,255		6,668
Inscribed Stock (in London) ... ..	56,512,500		1,963,869
„ Advances to Settlers Act ... ..	120,050		3,601
<b>Total, Funded Debt ... ..</b>		<b>£34,514,910</b>	
<b>Unfunded Debt—</b>			
Treasury Bills (for Loan Services)—			
Overdue, or unrepresented, which have ceased to bear interest ... ..	3,500		
Redemption of previous loans ... ..	1,902,900		68,616
Treasury Bills (Deficiency in Revenue) ... ..	1,214,516		37,620
<b>Total, Unfunded Debt... ..</b>		<b>£3,120,916</b>	
<b>Total Public Debt ... ..</b>		<b>£37,635,826</b>	<b>3,097,176</b>

The following table shows the total amount of stock under each rate of interest. There were, however, overdue, 5 per cent. debentures to the amount of £1,350 outstanding on the 30th June, 1906, which have ceased to bear interest:—

Interest—Per cent.	Amount of Stock.	Annual Interest thereon.
	£	£
5 ... ..	*4,050	135
4 ... ..	†23,294,094	931,596
3½ ... ..	1,500,000	56,250
3½ ... ..	44,812,984	1,568,454
3 ... ..	18,024,698	540,741
<b>Total ... ..</b>	<b>£87,635,826</b>	<b>£3,097,176</b>

\* Includes £1,350 overdue debentures.

† Includes £3,500 overdue Treasury Bills and £700 overdue Funded Stock.

The 3 per cents. comprise £1,500,000 Inscribed Stock, floated in London during January, 1898, and Inscribed Stock, floated in London, Funded Stock raised locally, and Treasury Bills representing Trust Funds in the hands of the Government, and so invested. The whole of the Treasury Bills bore interest at the rate of 4 per cent. to 31st December, 1894, but the rate of interest on a large proportion was reduced to 3 per cent. from the 1st January, 1895.

## DATES OF MATURITY.

The dates of repayment extend from 1908 to 1951; the sums repayable in the different years vary considerably in amount, the largest sum in any one year being £16,698,065 in 1924. The redemption of such a large amount in one year is well deferred, and before it arrives a more satisfactory procedure in dealing with loans falling due must be devised than now obtains. The question of the consolidation of loans has received some attention, and any scheme of consolidation adopted will probably provide for the principle of redemption over a specified period, at the option of the Government, and not on a given date as is the present practice.

The following table shows the due dates and the amount repayable in each year:—

Class of Security.	Interest Rate.	Amount raised in—		Total Outstanding.	Year when Due.
		London.	Sydney.		
Debentures .. .. .	5	£ 1,350	£ .....	£ 1,350	Overdue.
Funded Stock .. .. .	4	.....	700	700	Overdue.
Debentures .. .. .	4	2,865,500	.....	2,865,500	1908.
" .. .. .	4	884,000	816,854	1,200,854	1909.
" .. .. .	4	2,863,700	.....	2,863,700	1910.
" .. .. .	4	60,000	.....	.....	.....
N.S.W. Funded Stock .. .. .	4	.....	2,549,350	.....	.....
" .. .. .	3½	.....	1,500,000	9,884,508	1912.
" .. .. .	3½	.....	1,768,456	.....	.....
" .. .. .	3	.....	4,006,702	.....	.....
Inscribed and Funded Stock .. .. .	4	.....	1,000,000	.....	.....
" .. .. .	3½	.....	499,981	.....	.....
Debentures .. .. .	4	.....	131,100	3,381,081	1915.
" .. .. .	4	2,000,000	.....	.....	.....
Inscribed and Funded Stock .. .. .	3½	.....	250,000	.....	.....
" .. .. .	3½	12,826,200	.....	12,826,200	1918.
" .. .. .	3	.....	120,050	120,050	1919.
" Stock .. .. .	3½	.....	2,999,758	4,699,343	1921.
Inscribed and Funded Stock .. .. .	3½	.....	1,699,585	.....	.....
" .. .. .	3½	.....	1,532,114	1,532,114	1923.
" .. .. .	3½	16,500,000	.....	16,698,065	1924.
N.S.W. 1924 Stock .. .. .	3	.....	198,065	.....	.....
" .. .. .	3	.....	222,255	222,255	1925.
Inscribed Stock .. .. .	4	9,686,300	.....	9,686,300	1933.
" .. .. .	3	12,500,000	.....	12,500,000	1935.
" .. .. .	3½	2,000,000	.....	2,000,000	1950.
" .. .. .	3½	3,000,000	.....	3,000,000	1951.
N.S.W. 4 per cents. .. .. .	4	.....	580,190	580,190	Interminable.
Permanent .. .. .	5	.....	2,700	2,700	Permanent.
Funded Debt .. .. .	£	64,687,050	19,827,860	84,514,910	.....
Treasury Bills—					
Darling Harbour Resumptions .. .. .	4	.....	1,000	1,000	Overdue.
For Public Works .. .. .	4	2,500	.....	2,500	£150,000 re-
Deficiency of Revenue .. .. .	3	.....	822,447	822,447	deemed annually.
" .. .. .	3	.....	155,179	155,179	£100,000 re-
" .. .. .	3½	.....	236,890	236,890	deemed annually.
" .. .. .	4	.....	402,900	402,900	£50,000 annually
Redemptions .. .. .	3½	.....	500,000	500,000	from surpluses.
" .. .. .	3½	.....	1,000,000	1,000,000	1910.
" .. .. .	3½	.....	.....	.....	1911.
Unfunded Debt .. .. .	£	2,500	3,118,416	3,120,916	.....
Total Public Debt .. .. .	£	64,689,550	22,946,276	87,635,826	.....

As will be seen in this table, New South Wales is indebted to the London market for nearly three-fourths of the money raised under loan. This dependence on the English market was due originally to the lack of local capital; but of late years, when such capital has been fairly abundant, the Government has still turned to London, where the rate of interest at which it could borrow was much lower than would have been

demanded by the local capitalists. The local and English rates are now much nearer than at any period in the history of Australia, and it is probable that the Government could place small loans almost as advantageously in Sydney as in London.

#### CHARGES ON FLOATING LOANS.

The charges incidental to the floating of an inscribed stock loan in England are heavy. The chief expense is the composition duty of 12s. 6d. per cent. to the British Government on inscribed stock. The other charges—bank commission,  $\frac{1}{2}$  per cent.; brokerage,  $\frac{1}{4}$  per cent.; and minor expenses, which amount to about 1s. per cent.—are for services rendered.

The expenses incurred for the inscription and management of stock by the Bank of England are £500 per million for the first ten millions, £450 for the next five, and £400 per million for the next twenty-nine millions, and £200 per million for all further amounts. Prior to March, 1895, the charges were £100 per million more in each case. From May, 1899, all amounts raised through the agency of the Bank of England are charged £200 per million.

The commission paid to the London and Westminster Bank for the issue of the £3,000,000 inscribed stock in March, 1908, was  $\frac{1}{4}$  per cent.

The subjoined statement gives the charges of negotiation of the two last loans issued by the State in debenture form, and of the inscribed and funded stock loans floated during the period from 1895 to 1908:—

Year when Floated.	Amount of Principal.	Gross Proceeds.	Charges.				Expenses per £100 of—		
			Stamp Duty.	Bank Commission.	Brokers' Commission, Postage, and Petty Expenses.	Total.	Principal.	Gross Proceeds.	
	£	£	£	£	£	£	£ s. d.	£ s. d.	
Issued (in London) as Debentures.									
1904-5	1,000,000	1,900,000	2,500	5,000	*30,272	37,772	1 17 9	1 18 0	
1904-5	1,000,000								
Issued (in Sydney) as Debentures.									
1901-5	131,100	131,100	nil.	nil.	nil.	nil.	nil.	nil.	
Issued (in Sydney) as Funded Stock.									
1907-8	6,169,092	6,169,092	.....	.....	14,724	14,724	0 4 9	0 4 9	
Issued (in London) as Inscribed Stock.									
1895	4,000,000	3,876,605	25,000	20,000	10,721	55,721	1 7 10	1 8 9	
1898	1,500,000	1,506,269	9,375	7,500	4,441	21,316	1 8 5	1 8 4	
1901	4,000,000	3,760,000	25,000	20,000	60,347	105,347	2 12 8	2 16 0	
1902	3,000,000	2,835,000	18,750	15,000	*45,608	79,358	2 12 11	2 16 0	
1905-6	2,000,000	1,990,000	12,500	5,000	32,062	49,562	2 8 0	2 8 3	
1908	3,000,000	3,000,000	18,750	7,500	45,853	72,108	2 8 1	2 8 1	

\* Includes underwriting commission of  $\frac{1}{4}$  per cent.

#### REDEMPTIONS AND SINKING FUNDS.

At maturity, loans are either redeemed or renewed, the latter being the more usual operation. The State Debt and Sinking Fund Act was brought into operation on the 1st July, 1905. Under the provisions of this Act a general sinking fund was created, and an annual appropriation of £350,000 is made to the credit of the fund, and such further amount as Parliament may provide, while under the Treasury Bills Deficiency Act, 1905, an additional £50,000 must be transferred to the fund whenever the operations of a financial year leave a sufficiently large surplus to

enable this to be done. The Commissioners are directed from time to time to apply the amount at credit of the fund in purchasing, redeeming, or paying-off Government stock, debentures, or Treasury bills; and they are empowered to invest the moneys under the Act. The whole amount of £400,000, however, is not available for general purposes, inasmuch as a sum of £300,000 is required yearly to retire matured Revenue Deficiency Bills in accordance with the terms of the Acts under which they were issued. The residue (£100,000), together with credits, interest on stocks, fixed deposits in banks of issue, and any balance brought forward from the previous period constitutes the amount available for application to redemptions in any one year. The balance at credit of the fund on the 1st July, 1907, was £505,438. During the following twelve months the amount of £697,116 was used in redemption of loans, comprising 4 per cent. Funded Stock, £350,000, and Treasury Bills, £347,116. On the other hand, the withdrawal was partly counteracted by a credit of £400,000 out of the Consolidated Revenue Fund, in accordance with the provisions of the Treasury Bills Deficiency Act of 1905, and of the Act under which the fund was created. The transactions under the Act for the financial year ended 30th June, 1908, were as follow:—

<i>Dr.</i>					£	£
To Balance, 30th June, 1907—						
Cash...	...	...	...	...	178,456	
Bank Fixed Deposits	...	...	...	...	298,295	
In other Securities	...	...	...	...	28,687	
						505,438
Country Towns Water Supply—Repayments	...	...	...	...		918
Country Towns Sewerage—Repayments	...	...	...	...		531
To promote settlement under Crown Lands Act of 1895—						
Repayments	...	...	...	...		6,145
Annual Contribution from Consolidated Revenue Fund	...	...	...	...		350,000
Contribution under Treasury Bills Deficiency Act, 1905	...	...	...	...		50,000
Interest on Investments	...	...	...	...		7,085
Total						£920,117
<i>Cr.</i>					£	£
By Redemptions—						
N.S.W. 4 per cent. Funded Stock, Loan Act of 1900	...	...	...	...	350,000	
Treasury Bills Deficiency Act, 1905	...	...	...	...	50,000	
Treasury Deficiency Bills Act, 59 Vic. No. 22	...	...	...	...	197,116	
1 Edw. VII No. 8 " Acts, 64 Vic. No. 68 and	...	...	...	...	100,000	
						697,116
By Balance at credit of Commissioners—						
On Fixed Deposit	...	...	...	...	200,250	
Invested in N.S.W. Funded Stock	...	...	...	...	22,701	
On Deposit with Colonial Treasurer	...	...	...	...	49	
On Account Current	...	...	...	...	1	
						223,001
Total						£920,117

Under the provisions of the "State Debt and Sinking Fund Act, 1904," various balances at credit of Special Accounts established by the Treasury Bills Deficiency Act, 1889, were transferred to and administered by the State Debt Commissioners from the 1st July, 1905. The Special Accounts were as follows:—The Treasury Bills Deficiency Act of 1895; the Treasury Bills Deficiency Act, 1900; the Treasury Bills Deficiency (Amendment) Act, 1901; the Railway Loan Redemption Act of 1889; and the Sinking Funds constituted by the Loan Acts of 1894 (No. 2), 1895, 1896, 1897, 1898, and 1899.

## CHARACTER OF STOCK ISSUED.

As previously stated, loans have been raised by Treasury bills, debentures, and stock.

The Treasury bills are of a temporary character, and will in the course of a few years disappear from the statement of the public debt, either by substitution of ordinary stock when the temporary purpose for which they were issued has been served, or by redemption on maturity. The practice of issuing Treasury bills, either in anticipation of, or to make good, deficiencies in revenue, is of long standing; but, as will be seen later on, they have been made to serve another purpose, and money has been raised by their sale to meet certain obligations for public works and redemptions. This is an innovation which could not be well avoided in the disturbed markets of the last few years. The Treasury bills are like the British Treasury bills in name only; but they have some points in common with the British Exchequer bills. The amount current on the 30th June, 1908, was £3,120,916, of which sum £1,214,516 represents bills in aid of revenue, and £1,906,400 those issued for loan services and redemptions.

From 1842 to 1883 the practice followed was to raise loans by debenture bonds. In the year last named, however, the Inscribed Stock Act was passed, in conformity with the provisions of the Imperial "Colonial Stock Act of 1877," and the system of raising loans by debentures terminated for the time being. During the financial year ended 30th June, 1905, however, debentures to the amount of £131,100 were raised locally under Act 64 Vic. No. 60, and under that Act and Act 1 Edw. VII No. 62, debentures to the amount of £2,000,000 were raised in London, both amounts maturing in 1915, and bearing interest at the rate of 4 per cent. per annum. The amount of debentures outstanding on the 30th June, 1908, was £8,308,350, which is less than one-sixth of the inscribed stock current.

The issue of funded stock, which may be more appropriately termed registered stock, is regulated by four Acts passed in the years 1873, 1892, 1894, and 1895. Stock issued under the Act of 1873 is interminable, while that issued under the more recent Acts may be redeemed at the option of the Government, at the expiration of twenty years from the dates on which the Acts were passed, on the Treasurer giving twelve months' notice of his intention to redeem.

## SECURITY FOR THE PUBLIC DEBT.

In the foregoing pages much has been said of the indebtedness of the State. It is, therefore, only fair to say something of the resources on which the State may rely as security for the public creditors; but before examining the nature of these resources it may be well to recapitulate the liabilities outstanding. On the 30th June, 1908, these were as follows:—

Public Debt, including Treasury Bills for loan services...	£86,421,310
Treasury Bills in aid of Revenue ... ..	1,214,516
Total... ..	£87,635,826

The principal assets of the State are its business undertakings (railways, water supply, &c.), which in the last financial year yielded a net return, after paying working expenses, of £3,130,052, or more than enough to pay the interest on the whole of the debt; and the public lands, of which 120,123,140 acres are leased for pastoral or mining purposes, and 14,868,166 acres sold on deferred payments. The annual rent from the former is £690,000, and the balance due in respect of the latter amounts to £7,843,000.

The following statement shows how the public debt has been expended, and gives an approximate valuation of the resources on which the State may rely as security for the public creditors. The debt has been incurred principally on works of a reproductive character, 79 per cent. being on reproductive works; 8 per cent. on indirectly productive works for the facilitation of traffic; and 13 per cent. on unproductive works.

The value of the securities has been calculated by taking first the actual average net return of the business undertakings for the three years ended 30th June, 1908, and capitalising at  $3\frac{1}{2}$  per cent. The value of the public lands has been estimated on the basis only of the annual revenue received and the amount still outstanding on land alienated (conditional purchases). The 18 million acres still unalienated have not been taken into account. There is, therefore, little doubt that the value quoted is greatly underestimated, but no valuation has been made by the Lands Department. Finally, the actual amount of the Sinking Fund and cash in hand on 30th June, 1908, has been included.

Public Debt.		Estimated Value of Securities.	
Reproductive Works—		Business Undertakings—	
Railways and Tramways ..	£ 51,356,904	Railways and Tramways ..	£ 65,920,000
Water and Sewerage ..	11,418,688	Water and Sewerage ..	11,306,000
Sydney Harbour Trust ..	5,145,324	Sydney Harbour Trust ..	6,113,000
Darling Harbour Resumptions ..	1,170,686	Darling Harbour Resumptions ..	894,000
	£69,091,552		£84,247,000
Indirectly Productive Works—		Public Lands—	
Conservation of Water, &c. ..	1,185,257	Leased ..	14,203,000
Roads and Bridges ..	1,801,943	Amount outstanding on C.P.'s ..	7,843,000
Harbours and Rivers ..	4,392,542		£22,046,000
	£7,329,742		
Unproductive Works—		Cash in hand ..	
Public Buildings and Offices ..	4,415,965	..	2,774,000
Handed over to Commonwealth ..	3,430,647	Sinking Fund ..	223,000
Other Works ..	3,367,920		£2,997,000
	£11,214,532		
Total Debt ..	£87,635,826	Total Estimated Value of Securities	£109,290,000

Thus the value of the securities exceeds the debt by nearly 22 millions sterling, which may be regarded as extremely satisfactory, especially when it is considered that the State properties can hardly be valued on the basis of private business undertakings. State properties are not expected to earn as a maximum a much higher net return than is necessary to meet the interest on the capital expended. When the results are much in excess of the interest due, public opinion at once demands that reductions be made in the rates and charges.

It should also be borne in mind that, in valuing the securities, account has not been taken of works not directly producing revenue, such as harbour works, roads, bridges, and others, although of course, indirectly, these works have been of great service in developing the country.

#### EFFECT OF FEDERATION UPON THE STATE FINANCES.

The question of the effect which the operations of the Commonwealth may have upon the finances of the State is of great moment, and will continue to be, until the relations between the two are determined after the "Braddon" clause expires at the end of 1910.

Section 87 of the Constitution Act, which is generally known as the "Braddon Clause," and which expires on the 31st December, 1910, provides that the Federal Treasurer is not entitled to retain more than

one-fourth of the net proceeds of Customs and Excise for the purposes of defraying the expenses of the Commonwealth, the remaining three-fourths and as much more as the Treasurer does not require being handed back to the States.

The expenditure of the Commonwealth is separated under two heads—"new" expenditure, that is to say, on services called into being since federation, and "other" expenditure, or expenditure on services transferred by the States to the Commonwealth. The "new" expenditure is charged to the States proportionately to population, and the cost of transferred services over and above the revenue derived therefrom being ascertained, the sum of "new" and "other" expenditure is deducted from the net revenue from Customs and Excise, and the balance handed back to the States.

The revenue collected by the Commonwealth in New South Wales from Customs and Excise is shown in the following statement, which, for purposes of comparison, also gives the revenue for the three years prior to federation. There are also shown, since 1900, the proportion of the population of the Commonwealth dwelling in New South Wales, and the proportion contributed by New South Wales to the total Customs and Excise revenue:—

Year.	Amount.	Per head of Population.	Proportion of Population.	Proportion of Customs and Excise Revenue.
	£	£ s. d.	per cent.	per cent.
1898	1,551,827	1 3 8	.....	.....
1899	1,650,333	1 4 9	.....	.....
1900	1,778,993	1 6 3	36·15	23·01
1901 (half year)	1,019,008	0 14 11	35·92	23·91
1901-2	2,812,732	2 0 11	35·98	32·36
1902-3	3,478,742	2 9 8	36·17	36·81
1903-4	3,229,786	2 5 3	36·35	36·25
1904-5	3,033,617	2 1 8	36·57	35·04
1905-6	3,233,922	2 0 10	36·81	36·25
1906-7	3,573,313	2 6 8	37·06	37·03
1907-8	4,514,662	2 17 5	37·22	38·77

The contributions have increased by over £1 per head. The first uniform Customs tariff of the Commonwealth was introduced on 8th October, 1901, and on 8th August, 1907, an amended tariff was brought into operation, which increased the duties in many cases considerably.

The operations of the Post and Telegraph Department during the same period will be seen in the following table:—

Year.	Revenue.	Expenditure.
	£	£
1898-99	755,970	695,262
1899-1900	800,481	726,569
1900-01	833,942	789,290
1901-02	873,312	840,685
1902-03	906,793	890,203
1903-04	941,529	868,470
1904-05	980,151	894,690
1905-06	1,065,633	930,416
1906-07	1,191,489	946,929
1907-08	1,278,107	1,043,894

The expenditure does not include the cost of new works, &c., which amounted during the last five years to £81,637, £48,215, £53,955, £102,191, and £159,623 respectively.

The total Commonwealth revenue and expenditure in New South Wales since the inauguration of the Commonwealth were as follows :—

Year.	Revenue.	Expenditure.		
		New.	Transferred.	Total.
	£	£	£	£
1901 (half year)	1,296,963	47,605	361,785	409,390
1901-2	3,694,267	99,252	1,213,281	1,312,533
1902-3	4,391,019	114,131	1,228,793	1,342,929
1903-4	4,176,391	167,043	1,318,052	1,485,095
1904-5	4,021,310	169,084	1,323,587	1,492,671
1905-6	4,314,830	187,340	1,385,561	1,572,901
1906-7	4,782,122	283,184	1,473,801	1,756,985
1907-8	5,816,755	*463,579	1,735,704	2,199,283

\* Includes £150,000 paid to Trust Fund for Harbour and Coastal Defence, and £60,796 for Invalidity and Old-age Pensions.

The following statement shows, for each of the six years 1902-3 to 1907-8, during which a federal tariff has been in full operation—(a) the amount actually returned to New South Wales by the Commonwealth; (b) the amount which represents three-fourths of the net Customs and Excise revenue collected in New South Wales; and (c) the amount by which the sum actually returned was in excess of three-fourths of the Customs and Excise revenue collected :—

Year.	Amount actually received. (a)	Amount representing three-fourths of Net Customs and Excise Revenue. (b)	Excess of (a) over (b). (c)
	£	£	£
1902-3	3,053,133	2,556,232	496,901
1903-4	2,683,417	2,363,949	319,468
1904-5	2,529,070	2,225,990	303,080
1905-6	2,742,770	2,370,906	371,864
1906-7	3,022,351	2,624,200	398,151
1907-8	3,591,371	3,325,351	266,020

In the above statement balances from previous year are included.

In each year the amount actually returned by the Commonwealth to the State exceeded the statutory three-fourths of net Customs and Excise revenue, although the tendency has been for the excess payment to become smaller, and in the present financial year, 1908-9, the Federal Treasurer says that, owing to the increased commitments of the Commonwealth, not more than the three-fourths will be returned. The expenditure of the Commonwealth, which has increased largely during the last two years, is likely to still further increase in the near future, on account of new services among which may be mentioned an enlarged scheme of defence, old-age pensions, transcontinental railways, the Northern Territory, bounties, and others.

It is therefore evident that, after 31st December, 1910, the Commonwealth is not likely to agree to return even the three-fourths net Customs revenue provided under the Braddon clause. The amount of revenue to be returned after that date has exercised the minds of both Commonwealth and States' authorities, and since February, 1905, various conferences have been held between the Premiers and Treasurers of the Commonwealth and the various States, but up to the present the question has not been determined.

The principal features of the various proposals have been the extension of the Braddon clause or the return by the Commonwealth of a fixed annual sum to the States, based on the experience of a number of years.

## PRIVATE FINANCE.

### BANKING.

There are fourteen banks of issue operating in the State, four of which have their head offices in Sydney, two in Melbourne, two in Queensland, one in New Zealand, four in London, and one in Paris. Of the four local banks, three have branches outside the State, and the fourth confines its operations to New South Wales. Two of the local banks—the Bank of New South Wales and the City Bank of Sydney—carry on their business under the provisions of special Acts of Incorporation, and the liability attached to the shareholders is limited by the Acts to double the amount subscribed; the Commercial Banking Company of Sydney (Limited) and the Australian Joint Stock Bank (Limited) are registered as limited companies.

Considerable improvement might be made in the laws relating to banks and banking at present in force in the State, and the failure of several financial institutions, posing as banks, during the crisis of 1893, drew attention to the absolute necessity for a complete revision of the conditions under which deposits may be received from the general public, but up to the present no new legislation has been enacted. Institutions which transact the business of banking are required under the existing law to furnish, in a prescribed form, quarterly statements of their assets and liabilities, and from these statements and the periodical balance-sheets, the information here set forth has been prepared. Though the provisions of the law are observed by the banks, the returns furnished are by no means satisfactory, being unsuited to the modern methods of transacting banking business, while they cannot be accepted without question as disclosing the stability or otherwise of the institutions by whom they are issued.

As a rule, nothing can be elicited beyond the information set forth in the half-yearly or yearly balance-sheets. A want of uniformity is exhibited in respect of the dates of closing the accounts, and the methods of presentation are equally diverse. Important items which should be stated specifically are included with others of minor import, and in some cases current accounts, are blended with other accounts instead of being shown separately. The value of the information afforded to the public is illustrated by the fact that it was impossible to obtain the account of their liabilities from the publications of several institutions which suspended payment in 1893, and these particulars have never been disclosed.

### CAPITAL OF BANKS.

According to the latest information available, the paid-up capital of the fourteen banks doing business in the State, including the Comptoir National d'Escompte de Paris, is £20,710,164, of which £4,095,060 has a preferential claim on the profits of the companies. In the following table will be found a statement of the ordinary and preferential capital of each bank at the date shown, with the amount of the reserve fund of the institution. In the case of some of the companies which were reconstructed, there are reserves which

are held in suspense pending realisation of assets, and of these no account has been taken in the table:—

Bank.	Date of Balance-sheet.	Capital paid up.			Reserve Fund.
		Ordinary.	Preferential.	Total.	
		£	£	£	£
Bank of New South Wales .. .. .	Mar., 1908 ..	2,493,720	....	2,493,720	1,566,060
Commercial Banking Co. of Sydney (Limited) ..	June, 1908 ..	1,250,000	....	1,250,000	1,240,000
Australian Joint Stock Bank (Limited) .. ..	June, 1908 ..	154,570	....	154,570	10,060
City Bank of Sydney .. .. .	June, 1908 ..	400,000	....	400,000	11,560
Commercial Bank of Australia (Limited) .. ..	June, 1908 ..	95,544	2,117,350	2,212,894	274,000
National Bank of Australasia (Limited) .. ..	Mar., 1908 ..	1,192,440	305,780	1,498,220	170,000
Queensland National Bank (Limited) .. .. .	June, 1908 ..	413,308	....	413,308	69,000
Bank of North Queensland (Limited) .. .. .	June, 1908 ..	100,000	....	100,000	20,000
Bank of New Zealand .. .. .	Mar., 1908 ..	500,000	1,500,000	2,000,000	450,000
Bank of Australasia .. .. .	Oct., 1907 ..	1,600,000	....	1,600,000	1,470,000
Union Bank of Australia (Limited) .. .. .	Feb., 1908 ..	1,500,000	....	1,500,000	1,230,000
London Bank of Australia (Limited) .. .. .	Dec., 1907 ..	376,085	171,930	548,015	20,000
English, Scottish, and Australian Bank (Limited) ..	June, 1907 ..	539,437	....	539,437	154,004
Comptoir National d'Escompte de Paris .. ..	Dec., 1907 ..	6,000,000	....	6,000,000	821,726

The position of the capital account is shown in the table just given, but four of the banks had made small calls on their shareholders, which will increase their paid-up capital.

#### LIABILITIES AND ASSETS OF BANKS.

The liabilities of the banks enumerated, at the dates which have been previously given, aggregated £189,995,764, against which amount assets totalling £219,458,333 were shown. The following table gives the liability of each institution to the public, notes in circulation and deposits being distinguished from other liabilities. In some cases small items which should be classed with "other liabilities" are included with deposits, as they cannot be distinguished in the balance-sheets, and in the case of the Commercial Bank of Australia (Limited), the accounts of the Assets Trust, relating to the old bank prior to reconstruction, have been excluded:—

Bank.	Notes in Circulation.	Deposits.	Other Liabilities to Public.	Total Liabilities to Public.
	£	£	£	£
Bank of New South Wales .. .. .	1,063,124	26,929,331	4,207,740	32,200,195
Commercial Banking Co. of Sydney (Limited) ..	545,905	15,993,954	682,895	17,222,754
Australian Joint Stock Bank (Limited) .. ..	77,012	5,371,334	203,875	5,652,221
City Bank of Sydney .. .. .	98,502	1,253,353	669	1,352,524
Commercial Bank of Australia (Limited) .. ..	180,580	4,265,576	524,697	4,970,853
National Bank of Australasia (Limited) .. ..	275,186	7,741,534	866,133	8,882,853
Queensland National Bank (Limited) .. .. .	.....	7,496,241	414,873	7,911,114
Bank of North Queensland (Limited) .. .. .	.....	542,838	41,574	584,412
Bank of New Zealand .. .. .	912,027	12,771,418	1,888,676	15,522,716
Bank of Australasia .. .. .	505,428	15,879,335	2,861,587	19,246,350
Union Bank of Australia (Limited) .. .. .	498,047	19,965,904	2,006,075	22,470,026
London Bank of Australia (Limited) .. .. .	127,381	4,405,613	990,969	5,523,963
English, Scottish, and Australian Bank (Limited) ..	58,865	6,033,850	596,490	6,694,145
Comptoir National d'Escompte de Paris .. ..	.....	35,283,594	6,479,044	41,762,638

The assets of each bank are as follow :—

Bank.	Coin and Bullion and Cash Balances.	Advances.	Other Assets.	Total Assets.
	£	£	£	£
Bank of New South Wales.. ..	7,964,304	20,737,153	7,710,845	36,412,302
Commercial Banking Co. of Sydney (Limited).. ..	3,353,752	11,370,943	5,082,379	19,813,104
Australian Joint Stock Bank (Limited) .. ..	472,113	4,405,439	859,841	5,537,393
City Bank of Sydney .. ..	243,496	1,289,402	259,049	1,771,947
Commercial Bank of Australia (Limited) .. ..	1,126,304	4,780,255	1,591,009	7,498,168
National Bank of Australasia (Limited) .. ..	1,743,583	7,078,107	1,777,537	10,599,227
Queensland National Bank (Limited) .. ..	1,028,819	5,703,896	1,675,707	8,408,422
Bank of North Queensland (Limited) .. ..	101,625	494,803	113,210	709,638
Bank of New Zealand .. ..	2,526,916	9,871,341	5,606,057	18,004,314
Bank of Australasia .. ..	3,758,936	15,771,653	2,913,836	22,444,425
Union Bank of Australia (Limited) .. ..	4,231,035	14,320,351	6,239,695	25,341,084
London Bank of Australia (Limited) .. ..	797,951	4,115,236	1,227,650	6,140,837
English, Scottish, and Australian Bank (Limited) .. ..	840,283	4,891,871	1,727,444	7,449,598
Comptoir National d'Escompte de Paris .. ..	2,831,390	43,770,479	2,366,005	48,967,874

Both the assets and liabilities represent the total of the various banks wherever situated, and not merely those in New South Wales, which will be set forth subsequently. The difference between the assets and liabilities shown in the table amounts to £29,462,569, and consists of the paid-up capital and reserves (£28,507,866) and £954,703, representing the undivided profits.

#### METALLIC RESERVES OF BANKS.

The next table gives figures which relate to New South Wales only, the information being obtainable from the quarterly returns of average liabilities and assets within the State which the banks furnish in accordance with the terms of the Banks and Bank Holidays Act.

The proportion of metallic reserves which banking institutions must habitually keep in stock is not fixed by any enactment. Compared with the total liabilities, and with deposits at call and note circulation, the amount of coin and bullion has varied very considerably from year to year, as indicated below.

Year.	Coin.	Bullion.	Total.	Proportion of Metallic Reserves—	
				To Total Liabilities.	To Deposits at Call and Note Circulation.
	£	£	£	per cent.	per cent.
1860	1,578,424	90,052	1,668,476	25·7	*
1870	1,291,177	86,744	1,377,921	19·1	*
1880	3,488,554	75,008	3,563,562	18·3	49·5
1890	5,619,111	87,659	5,706,770	15·3	49·1
1900	5,933,076	193,050	6,126,126	18·0	44·8
1901	5,814,180	171,545	5,985,725	17·1	41·7
1902	6,329,551	223,172	6,552,723	18·8	46·7
1903	5,824,539	226,307	6,050,846	17·7	43·3
1904	6,175,911	276,446	6,452,357	18·5	46·1
1905	8,624,083	199,177	8,823,260	22·7	54·2
1906	7,247,347	260,016	7,507,363	18·1	40·8
1907	9,342,631	209,454	9,552,085	21·3	46·6
1908	9,350,942	249,924	9,600,866	20·8	48·7

\* Amount of deposits at call unobtainable.

In the foregoing table the figures represent the weekly average amounts during the quarter ended 31st December in each year, and for the two last years only, include the Comptoir National d'Escompte de Paris.

## LOCAL BUSINESS OF BANKS.

The banks are required to make quarterly statements of their business in a prescribed form; but these statements are not all made on the same lines, and it is necessary, therefore, to make certain adjustments in order to place the figures on a comparative basis. The alterations consist in the exclusion from the assets of two of the banks of the balances due by branches and agencies outside New South Wales to the head office in Sydney. The following table shows the assets and liabilities and the surplus assets of the banks, at intervals from 1860 onwards, and these figures also represent the averages for the quarter ended 31st December in each year:—

Year.	Assets within the State.	Liabilities within the State.	Surplus assets.
	£	£	£
1860	8,053,463	6,480,642	1,572,821
1870	9,863,071	7,198,680	2,664,391
1880	21,658,317	19,485,862	2,172,455
1890	52,436,977	37,248,937	15,188,040
1900	43,036,427	33,969,731	9,066,696
1901	43,437,559	35,077,832	8,359,727
1902	43,630,491	34,930,428	8,700,063
1903	43,165,576	34,250,541	8,915,035
1904	41,606,948	34,901,232	6,705,716
1905	43,694,137	38,860,062	4,834,075
1906	44,457,957	41,416,737	3,041,220
1907	49,345,915	44,937,466	4,408,449
1908	51,428,158	46,140,027	5,288,131

In New South Wales the assets of the banks touched their highest point in 1891 and 1892, and in the latter year the excess over liabilities was £16,146,513. From the sum just named, the excess of assets fell in 1901 to £8,359,727, and in June, 1906, to £3,041,220; while in December, 1908, the difference was £5,288,131. In the last three years there has been a decided expansion in the amount of banking business within New South Wales, and as it may be taken for granted that operations have been conducted on most prudential lines since 1893, the latest figures indicate the degree in which the State has flourished for some time past.

It will be apparent from a consideration of the table on a subsequent page that the deposits in banks have vastly increased in volume, while there has been a corresponding diminution in the rate of advances. Ten years ago, however, the deposits in the banks of the State reached a total of £31,000,000, while the advances were nearly £34,000,000. At June, 1908, however, the deposits were £43,909,887, while the advances were only £39,213,472. It appears from the records that prior to the financial crisis of 1893 the banks were accustomed to receive large deposits from the United Kingdom. At present they receive very little from that source, while conversely there are held on deposit in London considerable sums of money of Australian origin. That these amounts form a source of profit to the institutions goes without saying, the regrettable feature in the circumstance being that they could not be used for investments locally. Any expansion of banking in a country depends on the plenitude of sources of investment, and where these are restricted the banks would have no other recourse than to lower the rates of interest with a view to discouraging deposits.

The banking returns do not admit of any useful deductions being made from them, as the classification, both of assets and liabilities, required by the schedule to the Act is too general; thus under the term, "deposits not bearing interest," most of the banks are accustomed to return interest accrued and

all debts due by them other than deposits at interest, notes, and bills, the result being that in this respect the returns are misleading. It unfortunately happens, moreover, that there are no means of correcting the figures.

The assets, which naturally form the most interesting feature of a bank's returns, show coin and bullion separately, but 93 per cent. of the other assets are marshalled together under the term "notes and bills discounted, and all other debts due to the bank," and the lines on which business is conducted are therefore entirely hidden from sight. The following statement of liabilities for the past ten years refers to local business only:—

AVERAGE LIABILITIES WITHIN NEW SOUTH WALES.

(Exclusive of Liabilities to Shareholders.)

Year.	Number of Banks.	Notes in Circulation.	Bills in Circulation.	Deposits.			Balances due to other Banks.	Total Liabilities.
				Not bearing Interest.	Bearing Interest.	Total.		
		£	£	£	£	£	£	£
1899	13	1,340,557	202,468	11,779,918	19,648,107	31,428,025	84,009	33,055,059
1900	13	1,447,641	209,905	12,224,510	20,009,081	32,233,591	78,594	33,969,731
1901	13	1,499,937	218,943	12,841,599	20,416,857	33,258,456	100,496	35,077,832
1902	13	1,454,415	208,521	12,587,097	20,472,785	33,059,882	207,610	34,930,428
1903	13	1,378,642	228,059	12,591,637	19,986,224	32,577,861	65,979	34,250,541
1904	13	1,345,934	196,995	12,642,715	20,638,560	33,281,275	77,028	34,901,232
1905	13	1,430,335	218,555	14,859,427	22,211,627	37,071,054	140,118	38,860,062
1906	13	1,564,670	313,946	16,834,690	22,585,802	39,420,492	117,629	41,416,737
1907	14	1,756,696	263,018	18,729,709	24,034,857	42,764,566	153,186	44,937,466
1908	14	1,759,020	294,998	17,951,589	25,958,298	43,909,887	176,122	46,140,027

The assets for the same period were as given in the following table:—

AVERAGE ASSETS WITHIN NEW SOUTH WALES.

Year.	Number of Banks.	Coin.	Bullion.	Landed Property.	Notes and Bills discounted, and all other debts due to the Banks.	Notes and Bills of other Banks (and Queensland Treasury Notes).	Balances due from other Banks.	Total Assets.
		£	£	£	£	£	£	£
1899	13	5,865,622	217,136	1,819,359	33,688,862	287,030	316,652	42,194,661
1900	13	5,933,076	193,050	1,874,099	34,385,388	246,993	403,816	43,036,427
1901	13	5,814,180	171,545	1,744,664	35,068,787	259,292	379,181	43,437,559
1902	13	6,329,551	223,172	1,789,902	34,654,744	287,025	346,097	43,630,491
1903	13	5,824,539	226,307	1,804,956	34,689,452	304,418	318,904	43,165,576
1904	13	6,175,911	276,446	1,808,266	32,798,708	283,002	264,615	41,606,948
1905	13	8,624,083	199,177	1,799,231	32,447,659	326,750	297,237	43,694,137
1906	13	7,247,347	260,016	1,819,417	34,415,596	335,979	379,602	44,457,957
1907	14	9,342,631	209,454	1,746,940	37,244,216	359,038	443,636	49,345,915
1908	14	9,350,942	249,924	1,793,518	39,213,472	388,925	431,377	51,428,158

## ADVANCES BY BANKS.

Under the head of advances are included bills and promissory notes discounted, cash credits, and miscellaneous debts. The bulk of advances made are secured by the mortgage of real estate or by the depositing of deeds over which the lending institution acquires a lien; the discounting of trade bills does not amount to more than about 15 per cent. of the total cash credits and overdrafts. The banking returns are in such a defective form that an account of the nature of advances made, and the class of security advanced against, cannot be given. The most interesting summary that can be made is that which the following table supplies:—

Year.	Advances.	Ratio of Advances to Deposits.	Amount of Advances per Inhabitant.
	£	per cent.	£ s. d.
1860	5,780,700	111·9	16 17 6
1870	7,814,116	127·9	15 18 11
1880	17,210,205	96·2	23 12 4
1890	43,009,559	121·3	39 0 8
1900	34,385,388	101·2	25 4 0
1901	35,068,787	105·4	25 8 5
1902	34,654,744	104·8	24 12 4
1903	34,686,452	106·5	24 4 7
1904	32,798,708	98·6	22 8 10
1905	32,447,659	87·5	21 18 11
1906	34,415,596	87·3	22 9 7
1907	37,244,216	87·1	23 13 6
1908	39,213,472	89·3	24 8 7

The useful purpose which the banking system serves may be readily realised from the foregoing statement.

## DEPOSITS IN BANKS.

The total amount of money deposited with the fourteen banks operating in New South Wales during last year was, approximately, £163,937,870, and of this sum £43,909,887 was received locally. The excess of the total over local deposits was employed in the various countries to which the banks' business extended, some of course being used in New South Wales; but, from the very nature of the transactions of the banks, it is not possible to do more than make a surmise as to the amount so used. Dealing only with local deposits, the following statement shows the average amount of money deposited at various periods commencing with 1860; the distinction between interest-bearing deposits and those at call was first made in 1875:—

Year.	Deposits bearing Interest.	Deposits not bearing Interest.	Total Deposits.
	£	£	£
1860	.....	.....	5,164,011
1870	.....	.....	6,107,999
1880	11,948,383	5,934,641	17,883,024
1890	25,395,600	10,064,518	35,460,118
1900	20,009,081	12,224,510	32,233,591
1901	20,416,857	12,841,599	33,258,456
1902	20,472,785	12,587,097	33,059,882
1903	19,986,224	12,591,637	32,577,861
1904	20,638,560	12,642,715	33,281,275
1905	22,211,027	14,859,427	37,071,054
1906	22,585,802	16,834,690	39,420,492
1907	24,034,857	18,729,709	42,764,566
1908	25,958,298	17,951,589	43,909,887

The deposits reached their highest level in 1908, when, during the last quarter, of that year there was entrusted to the banks an average total of £43,909,887. In the year 1891 the deposits in banks amounted to £35,659,690, but in the years immediately subsequent fully five millions were withdrawn, the reduction being entirely in interest-bearing deposits, which were very largely withdrawn in 1893 at the time of the bank crisis, and during the succeeding year.

Since 1894 there has been a tendency to withdraw money from fixed deposit and to place it at current account. The current accounts have increased by over eight million since 1894, while the total deposits have increased to nearly £44,000,000.

The interest offering for fixed deposits has now fallen to 3 per cent. for sums deposited for twelve months; for six months' deposits the interest allowed is at the rate of  $1\frac{1}{2}$  per cent. The practice of allowing interest on money fixed for terms of less than six months was discontinued in May, 1894. The rates quoted are much the lowest that have been offered since banks were first opened for business, and money equal to their requirements is freely offered. The following is a statement of the average rates for twelve months' deposits from 1860 onwards. The figures of the last ten years do not include interest payable on deferred deposits by reconstructed banks:—

Year.	Bank Interest on Deposits for twelve months.	Year.	Bank Interest on Deposits for twelve months.
	per cent.		per cent.
1860	5	1903	3 to $3\frac{1}{2}$
1870	5	1904	$3\frac{1}{2}$
1880	5	1905	3 to $3\frac{1}{2}$
1890	$4\frac{1}{2}$	1906	3
1900	3	1907	3
1901	3	1908	3
1902	3		

Under normal conditions the annual rate of interest paid on fixed deposits is uniform for all banks; but some of the institutions, which have undergone reconstruction have not been in a position to reduce the rates on a large proportion of the deposits, so that they are paying the ordinary market rate of 3 per cent. on deposits received since reconstruction, while rates varying from 2 to 5 per cent. are being paid on the extended deposits. The reconstructed banks have power to release their extended deposits at any time on giving the necessary notice of their intention to do so, and the deposits when renewed are being accepted at the ordinary or reduced rate.

The liability to depositors of the reconstructed banks at the dates of suspension was £58,914,585; but up to the end of March, 1906, £43,322,992 of the deposits had been liquidated, £2,595,060 turned into preferential share capital, and £7,182,575 into inscribed or perpetual stocks or debentures, so that there were then deposits to the extent of £5,813,958 awaiting release.

By the end of March, 1907, the sum representing inscribed or perpetual stocks or debentures had varied slightly, being then less than at twelve months before by £6,943, while the preferential share capital was unaltered.

Under ordinary circumstances discount and overdraft rates should move down with the interest rates paid to depositors; and it is therefore evident, from a consideration of the profit and loss accounts of the various institutions, that the business of the banks has now attained a healthier condition than has existed since the crisis.

The rates for overdrafts and discounts for the ten years ended 1907 were as follow :—

Year.	Overdraft Rates.	Discount Rates.	
		Bills at 3 months.	Bills over 3 months.
	per cent.	per cent.	per cent.
1898	6 to 7	5 to 5½	5½ to 6½
1899	6 „ 7	5 „ 5½	5½ „ 6½
1900	6 „ 7	5 „ 5½	5½ „ 6½
1901	6 „ 7	5 „ 5½	5½ „ 6½
1902	6 „ 7	5 „ 5½	5½ „ 6½
1903	6 „ 7	5 „ 6	5½ „ 6½
1904	6 „ 7½	5½ „ 6	6 „ 6½
1905	6 „ 7½	5½ „ 6	6 „ 6½
1906	6 „ 7½	5½ „ 6	6 „ 6½
1907	6 „ 8	5 „ 6	6 „ 7

The bank exchange rate on London, at sixty days' sight, averages about 1 per cent., but is subject to a good deal of fluctuation. During the height of the bank panic in May, 1893, it was 3½ per cent., the banks at that date requiring all their available assets for other purposes. The rates for the ten years ended 1907 were :—

Year.	Exchange rate on London at 60 days' sight.	
	Buying.	Selling.
	per cent.	per cent.
1898	99½ to 100¼	100½ to 100¾
1899	98¾ „ 99½	100¼ „ 100¾
1900	98¾ „ 99½	100¼ „ 100¾
1901	99½ „ 99½	100¾ „ 100¾
1902	99½ „ 99¾	100¾ „ 100¾
1903	99 „ 99½	100¼ „ 100¾
1904	99 „ 99½	100½ „ 100½
1905	99¼ „ 99½	100½ „ 100½
1906	99¼ „ 99½	100½ „ 100½
1907	98¾ „ 99½	99¾ „ 100

#### PROFITS OF BANKS.

The results of the transactions of each bank for the latest period or which information is available, are given in the following table. With the exception of the Bank of New Zealand, the English, Scottish, and Australian Bank (Limited), and the London Bank of Australia (Limited), for which the figures

refer to twelve months' operations, the amounts given cover a period of six months. The dates of the balance-sheets are as shown previously :—

Bank.	Class of Shares.	Amount brought forward.	Net Profits less rebate on bills current.	Dividend Paid.		Amount transferred to Reserve Fund, Contingency Accounts, Reduction of Premises Account, &c.	Amount carried forward.
				Rate per cent. per annum.	Amount.		
Bank of New South Wales	Ordinary	£ 31,646	£ 156,741	10	£ 124,399	£ 30,000	£ 33,988
Commercial Banking Company of Sydney (Limited).	Ordinary	29,377	90,973	10	62,420	20,000	37,930
Australian Joint Stock Bank (Limited)	Ordinary	11,594	9,008	3	6,000	1,000	20,602
City Bank of Sydney	Ordinary	1,825	7,098	3	6,000	1,000	1,923
Commercial Bank of Australia (Ltd.)	Ordinary	8,406	78,166	3	31,760	46,151	8,661
National Bank of Australasia (Limited)	Ordinary	4,807	53,347	5	37,456	16,000	4,698
Queensland National Bank (Limited)	Ordinary	1,678	3,677	4	2,000	43,482	3,226
Bank of North Queensland (Limited)	Ordinary	31,675	329,923	7	87,500	220,000	54,098
Bank of New Zealand	Ordinary	17,325	205,760	14	112,000	95,000	16,075
Bank of Australasia	Ordinary	35,870	163,188	12	105,900	58,000	36,053
Union Bank of Australia (Limited)	Ordinary	23,908	34,951	5	22,332	10,000	26,527
London Bank of Australia (Limited)	Ordinary	17,012	78,190	4	38,837	31,991	25,274
English, Scottish, and Australian Bank (Limited).	Ordinary	15,142	401,571	6	360,000	30,346	26,367
Comptoir National d'Escompte de Paris	Ordinary						

The published balance-sheets of banks as a rule give very meagre information of the results of their working. In the matter of management expenses equal reticence is observed, not one bank whose head office is in the State giving this information to its shareholders. The net profits are, therefore, the only data on which a comparative statement can be based, and the ratio of such to paid-up capital and reserves, and to the banks' trading and total assets, will be found in the subjoined statement :—

Bank.	Net Profits for twelve months, 1907-1908.	Ratio of Net Profits to—	
		Paid-up Capital and Reserves.	Total Assets.
	£	per cent.	per cent.
Bank of New South Wales	239,708	5.96	0.66
Commercial Banking Co. of Sydney (Limited)	133,978	5.42	0.68
Australian Joint Stock Bank (Limited)	16,217	1.69	0.28
City Bank of Sydney	12,303	3.00	0.69
Commercial Bank of Australia (Limited)	68,693	2.76	0.92
National Bank of Australasia (Limited)	103,290	6.23	0.97
Queensland National Bank (Limited)	40,000	8.38	0.48
Bank of North Queensland (Limited)	7,049	5.87	0.99
Bank of New Zealand	184,217	5.97	0.74
Bank of Australasia	222,779	7.07	0.99
Union Bank of Australia (Limited)	211,747	7.76	0.83
London Bank of Australia (Limited)	34,952	6.26	0.57
English, Scottish, and Australian Bank (Limited)	60,505	1.80	0.81
Comptoir National d'Escompte de Paris	371,225	5.46	0.76

In the above table the net profits are exclusive of amounts transferred to Reserve and Contingency Funds.

The figures stated show a slightly declining ratio of net profits to capital and reserves in a majority of the banks, the reason probably being that business is being regulated on more conservative lines, the banks being content with relatively smaller profits while steadily adding to their reserves. The small percentages of net profits on the capital and reserves of the Australian Joint Stock Bank (Limited), and the English, Scottish, and Australian Bank (Limited), are due to the inscribed deposit stock with which their capital liability has been loaded since their reconstruction in

1893. In the former these erstwhile deposits amount to £796,805, and in the latter to £2,654,394. These stocks bear interest at fixed rates, and do not participate in the dividends declared periodically. They are included with the paid-up capital and reserves, however, on which the above percentages have been calculated.

#### WORKING EXPENSES.

Intimately connected with the question of profits is that of working expenses, and the cost of working banking institutions in Australasia is undoubtedly large. This is partly due to the wide and sparsely populated area over which operations are conducted, and partly to the class of business in which banks are engaged. The following is a statement of the cost of management of the several banks enumerated:—

Bank.	Expenses of Management for twelve months, 1907-8.	
	Total.	Ratio to bank's resources (Coin, Bullion, Property, Debts due by Customers, &c.).
	£	per cent.
Bank of New South Wales	*	....
Commercial Banking Company of Sydney (Limited)	*	....
Australian Joint Stock Bank (Limited)	*	....
City Bank of Sydney	*	....
Commercial Bank of Australia (Limited)	129,567	1.73
National Bank of Australasia (Limited)	141,474	1.33
Queensland National Bank (Limited)	84,912	1.01
Bank of North Queensland (Limited)	16,365	2.31
Bank of New Zealand	230,087	1.27
Bank of Australasia	318,733	1.41
Union Bank of Australia (Limited)	291,475	1.16
London Bank of Australia (Limited)	78,602	1.28
English, Scottish, and Australian Bank (Limited)	108,033	1.44
Comptoir National d'Escompte de Paris	*	....

\* Information not available.

It will be observed that the expenses of working of the four local banks and those of the Comptoir National d'Escompte de Paris are not shown in the statement just given. These banks do not disclose even to their shareholders such details of their business, so that the reference to the cost of banking business is seriously incomplete; but taking such banks as are enumerated as a guide to the whole of the institutions, the total expenses of management of the fourteen banks which have offices in the State may be set down for the year 1907-8 at £2,878,800.

The following statement may be taken as approximately correct:—

Total assets	£219,458,333
Capital and Reserve Funds	31,459,416
Earnings, less reserve for bad and doubtful debts, and rebate on bills current	6,796,142
Gross expenditure, including interest	5,139,479
Net earnings	1,656,663

Compared with the total assets, the net earnings represent 0.75 per cent., and compared with the banks' own resources—i.e., capital and reserved profits—5.27 per cent. Of the gross expenditure set down above, expenses of management absorbed £2,878,800, or 42.36 per cent. of the earnings after deduction from the latter of the amounts reserved for bad and doubtful debts and rebates on current bills. It would, therefore, appear that for every £1 of net earnings, £1 14s. 9d. are spent in management expenses. The cost of working banking institutions in Australia is undoubtedly very large; but this class of business is everywhere expensive, and an analysis of the balance-sheets of twenty-four British joint stock banks show that the expenses of management amount to nearly £1 3s. 2d. for every £1 of net earnings.

The meagre information conveyed by the Profit and Loss Accounts of most of the banks as published, does not admit of a statement of the amount of interest paid on deposits for 1907-8.

The following table affords a comparison of the working of New South Wales banks with the joint stock banks in the United Kingdom which publish profit and loss accounts. The figures relate to the year 1908 :—

Banks in—	No. of Banks.	Capital and Reserves.			Total Deposits.	Total Advances.	Percent- age of Advances to Deposits.
		Paid-up Capital.	Reserves and Undivided Profits.	Total.			
		£	£	£	£	£	
England ..	53	62,753,888	40,641,603	103,395,491	697,726,787	464,243,832	66·53
Scotland ..	10	9,241,070	8,989,774	18,230,844	108,722,904	73,023,467	67·16
Ireland ..	9	7,309,231	4,470,298	11,779,529	57,486,546	44,225,663	76·93
N. S. Wales..	14	20,710,164	8,266,690	28,976,854	163,937,370	149,106,932	90·95

Most of the banks doing business in this State reduced their working expenses during the years following the bank crisis of 1893, this being accomplished mainly by closing unprofitable branches. The accounts for last year show that it is realised now that any pressing necessity for retrenchment has passed as business has greatly improved.

The number of banks and branches open throughout New South Wales on 30th June, 1908, was 523, an increase of 56 since 1906. This gives a proportion of one bank or branch to every 2,970 persons. In England the proportion in 1905 was one bank to 7,600 persons; in Scotland, one to every 4,100; and in Ireland, one to every 7,100.

#### BANKS' EXCHANGE SETTLEMENT.

The Banks' Exchange Settlement Office, which was established in Sydney on the 18th January, 1894, is not a clearing-house in the accepted term, as the exchanges are still effected daily at the banks by clerks of each institution; but the results of the daily operations are notified to the secretary of the Banks' Exchange Settlement, who establishes the daily credit of each bank with the "pool." The "pool" is placed in the hands of three trustees, and consists of £700,000 in gold, which is deposited in the vaults of three of the banks, and cannot be circulated or disturbed. The contributions to the "pool" are according to the volume of the operations of each bank. The secretary notifies each bank daily of the amount of its credit with the "pool," and no bank is permitted to allow its balance to continue below 25 per cent. of the fixed contribution. In the event of its credit reaching this margin, the bank is required to make up its deficiency with gold; this payment, however, is not made to the "pool," but to such other banks as may happen to have at their credit with the "pool" a larger sum than is required by the agreement. This arrangement enables the £700,000 comprising the "pool" to remain intact.

The volume of the exchanges during the last ten years is shown in the following table:—

Year.	Amount of Exchanges.	Year.	Amount of Exchanges.
	£		£
1899	146,188,144	1904	177,797,335
1900	144,080,314	1905	189,826,381
1901	167,676,707	1906	220,860,512
1902	178,637,708	1907	234,169,822
1903	180,961,406	1908	227,736,243

## SAVINGS BANKS.

The savings banks are on a very different footing to banks of issue, being to a greater or less extent under State control and otherwise safeguarded, so that they enjoy public confidence. The institutions classed as savings banks may be divided into two kinds—those which, previous to the federation of the Australian States, were worked in conjunction with the Post Office, but are now under the control of Commissioners appointed by the State, and those under trustees who are nominated by the Government. The declared objects of these banks are to encourage thrift in the working classes, and to provide a safe investment for the funds of charitable institutions, friendly societies, &c. They, however, have become so popular that all classes of the community are represented amongst their depositors.

In both institutions sums of one shilling or any multiple of that amount may be deposited; but, with the exception of the funds of charitable institutions and friendly societies, deposits exceeding £500 do not bear interest on such excess in the Government Savings Bank; and in the case of the Savings Bank of New South Wales, deposits made by any one individual exceeding the sum of £200 do not bear interest on the excess, but interest on the full deposit is allowed on funds of any charitable institution, or of any legally established friendly or other society. During the year ended 31st December, 1907, the Government Savings Bank allowed 3 per cent., and the Savings Bank of New South Wales 3½ per cent. on balances.

The returns show an enormous development since 1861, although there has been a decline in the amount per depositor from that period; but this is no sign of retrogression, for the large increase in the number of depositors, which must be taken into consideration, evidences the fact that the less affluent classes of the community are more largely represented in the books of the banks than was formerly the case. The following statement shows the number of depositors and amount of deposits at the end of each year in the case of the Government Savings Bank since 1880; and since 1860 in respect of the Savings Bank of New South Wales, together with the average amount of deposit per depositor:—

Year ended 31st December.	Government Savings Bank.		Savings Bank of New South Wales.		Total.		
	Number of Depositors.	Amount of Deposits.	Number of Deposits.	Amount of Deposits.	Number of Depositors.	Amount of Deposits.	Average Amount per Depositor.
	No.	£	No.	£	No.	£	£ s. d.
1860 ...	*	*	12,027	557,197	12,027	557,197	46 6 7
1870 ...	*	*	23,570	936,465	23,570	936,465	39 14 7
1880 ...	24,602	586,496	36,929	1,489,360	61,531	2,075,856	33 14 9
1890 ...	83,312	1,875,905	60,514	2,854,564	143,826	4,730,469	32 17 10
1900 ...	198,014	6,045,622	84,629	4,855,760	282,643	10,901,382	38 11 5
1901 ...	216,947	6,647,289	89,364	5,161,421	306,311	11,808,710	38 11 0
1902 ...	230,755	7,100,108	92,457	5,325,356	323,212	12,425,464	38 8 10
1903 ...	237,389	7,018,425	94,567	5,326,198	331,956	12,344,623	37 3 9
1904 ...	†254,331	†7,952,885	95,808	5,268,677	350,139	13,221,562	37 15 3
1905 ...	†270,982	†8,883,651	101,383	5,545,367	372,365	14,429,018	38 15 0
1906 ...	283,401	9,322,923	108,649	5,997,609	392,050	15,320,532	39 1 7
1907 ...	305,265	11,128,495	116,663	6,401,662	421,928	17,530,157	41 10 11

\* Not open.

† To 30th June, 1935.

‡ To 30th June, 1906.

At the 31st December, 1907, the liabilities of the Government Savings Bank amounted to £11,186,107, of which £11,128,495 represented deposits, and £19,654 balance of profit and loss account. The investments made on behalf of the bank, and other assets, including accrued interest, were as follows:—

Government Stocks—	£
New South Wales ... ..	7,188,794
Other States ... ..	109,945
Treasury Bills—New South Wales ... ..	1,734,709
Debentures—	
Government Savings Bank—Advance Department ...	309,660
Sydney Municipal Council ... ..	50,937
Waverley „ „ ... ..	49,352
Lithgow „ „ ... ..	6,040
Bank Fixed Deposits ... ..	244,071
Uninvested funds in Treasury ... ..	1,157,282
Mortgage Securities ... ..	64,804
Bank Premises ... ..	2,438
Sundry accounts due to Bank ... ..	5,220
Advance Department ... ..	983
Cash at Head Office and Branches ... ..	261,932
Total ... ..	£11,186,107

The Savings Bank of New South Wales was originally administered by nine trustees; but under an amending Act passed in 1853, since consolidated as the “Savings Bank of New South Wales Act, 1902,” the number may be increased, but cannot exceed eighteen. The trustees have power to nominate a managing trustee, who, if not already a trustee, becomes so *ex-officio*. The number of trustees at the end of 1907 was thirteen, exclusive of the managing trustee. Unlike those of the Government Savings Bank, the funds of this institution are applied to investments of a general nature, such as mortgages, Government and municipal securities, and deposits with banks of issue and the Treasury. The amount invested under each head, including interest accrued, at the close of 1907, was as follows:—

How invested.	Amount.
	£
Mortgages ... ..	1,130,557
Government and Municipal Securities ... ..	3,917,116
Fixed Deposits in Banks of Issue ... ..	1,537,163
“Working Account” (Bank of New South Wales) ...	70,809
Land and Banking Houses ... ..	74,000
Uninvested ... ..	28,918
Total ... ..	£ 6,758,563

The reserve fund, depreciation account, and profit and loss account, on the 31st December, 1907, amounted to £355,218. According to the published statements of this institution, it could pay £1 1s. 1½d. for every £1 liability. The classification of the deposits on the 1st January, 1908, was as follows:—

Classification.	Depositors.	Deposits.	Average per Depositor.
	No.	£	£ s. d.
£20 and under ... ..	64,632	267,590	4 2 10
Over £20 and under £50 ... ..	15,505	498,562	32 3 1
£50 and under £100 ... ..	11,220	793,130	70 13 9
£100 „ „ £200 ... ..	12,078	1,704,947	141 3 3
£200 „ „ £300 ... ..	12,429	2,643,598	212 13 11
£300 and upwards ... ..	799	493,835	618 1 4
Total .....	116,663	6,401,662	54 17 6

The following table shows the number of depositors in the savings banks of the principal countries of the world, the total amount standing at their credit, and the average amount per depositor. The figures are compiled from the latest available returns :—

Country.	Depositors. No.	Amount of Deposits in Savings Banks.	Average Amount per Depositor.
		£	
United Kingdom ... ..	12,093,783	209,005,745	£ s. d. 17 5 8
Sweden ... ..	1,948,632	47,924,396	24 11 11
Norway ... ..	826,873	22,413,872	27 2 2
Holland ... ..	1,583,620	18,510,333	11 13 9
Austria-Hungary ... ..	6,293,003	226,346,746	35 19 4
Belgium ... ..	2,311,845	31,423,183	13 11 10
Italy ... ..	6,659,847	124,345,736	18 13 5
France ... ..	12,245,414	196,648,621	16 1 2
Denmark ... ..	1,352,490	46,357,493	34 5 6
Russia ... ..	5,665,998	193,938,948	34 4 7
United States ... ..	8,588,811	758,261,368	88 5 8
Canada * ... ..	205,623	12,721,797	61 17 5
New South Wales ... ..	421,928	17,530,157	41 10 11
Victoria ... ..	501,393	12,951,779	25 16 8
Queensland ... ..	92,912	4,543,104	48 17 11
South Australia ... ..	139,670	5,304,704	37 19 7
Western Australia ... ..	67,695	2,879,882	42 10 10
Tasmania ... ..	53,824	1,488,057	27 12 6
New Zealand ... ..	364,422	12,825,063	35 3 10

\* Exclusive of £5,630,164 in Special Savings Banks—number of depositors not available.

The figures for the United States are given on the authority of the official statistical abstract, and are, to all appearances, correct.

#### REGISTERED COMPANIES.

The Land, Building, Investment, and Trading Companies established with the object of making profit and doing general business, may be registered under the Companies Act which was passed in 1874 and amended under the Consolidating Act of 1901. Benefit Building, Investment, Co-operative, and Industrial Societies, worked for the mutual benefit and advantage of the subscribing members only, were registered under the Friendly Societies Act of 1873 until 1902, when the Building and Co-operative Societies Act, 17 of 1902 was passed. Mining Companies in which the shares carry no liability fall under the No-liability Mining Companies Act of 1896.

The provisions of the Companies Act, and the Building and Co-operative Societies Act, are so framed that they are applicable to nearly all classes of financial institutions, very few of which are now carried on under special Acts. According to the records of the Registrar of Joint Stock Companies, there appeared to be about 1,131 companies whose registration held good at the 31st December, 1907, but it is believed that in this number are included some companies which have really passed out of existence without the formal and legal steps required by the Act being taken.

The registrations under the Companies Act for the five years ended 1907 were :—

Registrations.	1903.	1904.	1905.	1906.	1907.
New Companies registered .. ..	154	127	170	189	189
Companies wound-up .. ..	56	64	53	67	62
Amount of fees received .. .. £	2,099	1,567	1,901	2,239	2,302

Besides the number of companies shown in the above table as wound up, 156 were reported during the five years as being defunct. In these cases no action appears to have been taken to determine formally the existence of the companies.

The liabilities, assets, and paid-up capital of the eleven deposit companies, for the quarter ended June, 1908, were as follows:—

Companies.	Number.	Liabilities (exclusive of Liabilities to Shareholders).			Assets.			Paid-up Capital.
		Deposits.	Other Liabilities.	Total.	Landed Property.	Other Assets.	Total.	
		£	£	£	£	£	£	£
Investment .. .. .	9	179,274	239,531	418,805	705,339	262,389	967,728	714,710
Trading .. .. .	2	88,944	338,724	427,668	545,797	3,525,333	4,071,130	2,598,495
Total .. .. .	11	268,218	578,255	846,473	1,251,136	3,787,722	5,038,858	3,313,205

#### BENEFIT, BUILDING, AND INVESTMENT SOCIETIES.

According to the provisions of the Friendly Societies Act of 1873, since consolidated under the Building and Co-operative Societies Act (17 of 1902), any number of persons may form themselves into a Benefit, Building, and Investment Society for the purpose of raising money by subscription to enable members to erect and purchase dwellings, &c., which must be secured to the society by mortgage until the amount of the shares has been fully paid. These institutions, as previously mentioned, are established solely for the benefit and advantage of the subscribing members, and their operations are, as a rule, confined to the subscriptions. There were, however, 7 institutions in 1907 receiving money on deposit from the general public, the aggregate amount of which was £406,680. Up to the close of 1907 the Benefit, Building, and Investment Societies which had been registered under the Friendly Societies Act and the Building and Co-operative Societies Act (17 of 1902) numbered 175, of which only 62 were in operation at that date. Of the other institutions, some had ceased to exist, being Terminating Societies; others had become Limited Companies under the Companies Act, and consequently ceased to operate under the Friendly Societies Act; and a large number had become defunct.

Returns have been received from 57 institutions operating. The liabilities and assets, &c., of these 57 societies at the date of their latest balance-sheets were as follow:—

Societies.	Number.	Liabilities (exclusive of Liabilities to Shareholders).			Assets.			Paid-up Capital and Contingency Funds.
		Deposits.	Other Liabilities.	Total.	Advances.	Other Assets.	Total.	
		£	£	£	£	£	£	£
Starr-Bowkett .. .. .	39	NIL.	22,199	22,199	162,618	32,746	195,364	156,972
Building .. .. .	4	1,174	3,630	4,804	34,294	3,934	38,228	32,738
Building and Investment .. .. .	11	115,788	5,108	123,896	272,019	27,042	299,060	170,786
Land, Building, and Investment.	3	289,718	1,301	291,019	368,783	75,416	444,199	136,396
Total .. .. .	57	406,680	32,238	438,918	837,713	139,138	976,851	496,892

The amount of paid-up capital and contingency funds shown is exclusive of a net amount of £41,041 at credit of profit and loss account.

## CO-OPERATIVE TRADING SOCIETIES.

The provisions of the Act relating to Co-operative Societies have been used by the public to a very limited extent, since of 103 societies registered to the end of 1907, not more than 36 were in existence. The purposes for which these 36 societies were formed are as follows:—General purposes, 28; produce, 1; bakery, 2; dispensaries, 2; gardening, 1; timber-cutting, 1; and journalism, 1.

The workings of the Co-operative Societies during the years 1906 and 1907 will be seen below:—

Liabilities.	1906.	1907.	Assets.	1906.	1907.
	£	£		£	£
Share Capital ...	64,392	74,882	Freeholds ...	34,051	40,636
Reserves ...	32,294	35,471	Stocks ...	75,789	96,759
Other Liabilities ...	34,057	42,355	Other Assets ..	48,492	50,861
Profits ...	27,589	35,548			
Total ...	158,332	188,256	Total ...	158,332	188,256

The progress during the year 1907 was very satisfactory. Share capital increased by 16 per cent., and reserves by 10 per cent. Freeholds with plant and fixed stock, increased very largely, and stocks by 26 per cent. The proportion of profits to capital and reserves combined was 33 per cent. in 1906, and 32 per cent in 1907. Considering the small amount of capital invested, the results obtained were surprisingly good.

## TRADE MARKS.

Since the administration of matters connected with trade-marks throughout the Commonwealth has passed to the control of the Federal Government, it has been difficult to gather statistical data with reference to transactions in New South Wales. The information in the following table refers to those under the State Act of 1865:—

Transactions.	1901.	1902.	1903.	1904.	1905.
Applications for trade marks ...	436	471	412	484	616
New trade marks granted ...	380	412	332	419	413
Trade marks transferred ...	87	90	141	180	57
Amount of fees received ...	£ 1,369	1,513	1,447	1,568	1,595

The figures given do not wholly apply to registrations of local manufacturers, as trade-marks, like patents, are unprotected in the State if not registered locally. The registration fees were a source of income to the State, as an application for registration cost three guineas, and a transfer of a trade mark one guinea; no charges were made, however, for applications withdrawn or refused.

Under the Commonwealth Act, now in force for the whole of Australia, in addition to ordinary trade-marks registered for manufacturers and employers, provision is made for granting a "Workers' Trade Mark," which may be registered for a body of workers, associated co-operatively or in common employment together, as an indication that the articles bearing such trade-mark have been manufactured or produced exclusively by the labour of members of the body on whose behalf the trade-mark has been registered. This is popularly known as the "Union label." The mark may be used also in cases where goods have been produced only partially by an association of labour, provided that it is attached only to the part so produced.

## CURRENCY.

The British sovereign is the universal currency in Australia; the silver and bronze current being rather tokens than coins. The banks of issue make use of bank notes, but these are not legal tender in any State. Gold coins are legal tender to any amount; silver for an amount not exceeding forty shillings; and bronze for one shilling. The standard weight and fineness of each coin are given in the following statement. The least current weight of a sovereign is 122·5 imperial grains, and of a half-sovereign 61·125 grains:—

Denomination of Coin.				Standard Weight.	Standard Fineness.	
				Imperial grains.		
				Troy.		
Gold	{	Sovereign	...	123·27447	{	Eleven-twelfths fine gold, or decimal fineness 0·91666, and one-twelfth alloy.
		Half-sovereign	...	61·63723		
Silver	{	Crown	...	436·36363	{	Thirty-seven-fortieths fine silver, or decimal fineness 0·925, and three-fortieths alloy.
		Double Florin	...	349·09090		
		Half-crown	...	218·18181		
		Florin	...	174·54545		
		Shilling	...	87·27272		
		Sixpence	...	43·63636		
		Threepence	...	21·81818		
				Avoirdupois.		
Bronze	{	Penny	...	145·83333	{	Mixed Metal:—Copper, 95 parts; tin, 4 parts; and zinc, 1 part.
		Halfpenny	...	87·50000		
		Farthing	...	43·75000		

The only coins struck at the Sydney Mint are of gold, though silver and bronze of English coinage are also issued.

Standard or sovereign gold has a fineness of 22 carat, and is worth £3 17s. 10½d. per oz.; pure gold, or 24 carat, is worth £4 4s. 11½d. per oz. The whole of the gold contained in deposits sent to the Sydney Branch of the Royal Mint for melting, assaying, and coining is accounted for at the rate of £3 17s. 10½d. per oz. standard or sovereign gold.

Standard silver is 0·925 fine. Owing partly to its greatly increased production, and still more to its demonetisation in a large part of Europe, and the restrictions placed upon its free coinage in countries which still have a double standard of coinage, its value has decreased by nearly 47 per cent. during the last thirty years. The average price of standard silver in the London market for various years since 1875 is given in the annual reports of the Deputy Master of the Royal Mint as follows:—

Year.	Price per standard oz.	Year.	Price per standard oz.	Year.	Price per standard oz.
	d.		d.		d.
1875	56½	1900	28½	1905	27½
1880	52½	1901	27½	1906	30½
1885	48½	1902	24½	1907	30½
1890	47½	1903	24½		
1895	29½	1904	26½		

The fluctuations in its value during 1907 are shown in the following table of average monthly prices :—

Month.	Price per standard oz.	Month.	Price per standard oz.	Month.	Price per standard oz.
	d.		d.		d.
January ...	31 $\frac{3}{4}$	May ...	30 $\frac{7}{16}$	September ...	31 $\frac{5}{16}$
February ...	31 $\frac{3}{8}$	June ...	30 $\frac{5}{8}$	October ...	28 $\frac{1}{8}$
March ...	31 $\frac{5}{16}$	July ...	31 $\frac{5}{16}$	November ...	27 $\frac{1}{8}$
April ...	30 $\frac{1}{4}$	August ...	31 $\frac{5}{8}$	December ...	25 $\frac{5}{8}$

The nominal value of one pound (avoirdupois) of bronze coined into pence is 4s., and into halfpence or farthings 3s. 4d.

The Sydney Branch of the Royal Mint was opened on the 14th May, 1855, and the weight of gold sent for coinage to the 31st December, 1907, was 32,387,220 oz., valued at £119,644,986. Of this quantity New South Wales produced 10,833,767 oz., of the value of £40,350,262, the amount from each source being :—

Where produced.	Weight.	Value.
	oz.	£
New South Wales ...	10,833,767	40,350,262
Victoria ...	1,443,205	5,925,057
Queensland ...	15,335,661	54,440,652
South Australia ...	87,057	304,731
Tasmania ...	133,486	468,929
New Zealand ...	4,214,578	16,866,855
Other Countries ...	78,031	274,477
Old Coin, &c. ...	261,435	1,014,023
Total ...	32,387,220	119,644,986

Nearly the whole of the gold won in New South Wales and Queensland, and also a small portion of the produce of the other States and New Zealand, is received at the Sydney Mint for coinage. The total value of the gold raised in Australasia to the end of 1907 amounted to £559,949,992, of which £119,644,986, or 21·37 per cent., passed through the Mint of this State. The value of gold coin and bullion issued up to the end of 1907 was £119,428,311, of which £113,581,500 worth of gold was converted into coin, the value of sovereigns and half-sovereigns being :—

Year.	Sovereigns.	Half-sovereigns.	Total.
	£	£	£
1855 to 1897	81,283,500	2,622,500	83,906,000
1898	2,548,000	50,000	2,598,000
1899	3,259,000	65,000	3,324,000
1900	3,586,000	130,000	3,716,000
1901	3,012,000	.....	3,012,000
1902	2,813,000	42,000	2,855,000
1903	2,806,000	115,500	2,921,500
1904	2,986,000	.....	2,986,000
1905	2,778,000	.....	2,778,000
1906	2,792,000	154,000	2,946,000
1907	2,539,000	.....	2,539,000
Total .....	110,402,500	3,179,000	113,581,500

The first issue of bronze from the Sydney Mint took place in 1868, but it was not until 1879 that silver coin was issued, the respective values of each to the end of the year 1907 being—bronze, £86,850; and silver, £1,139,200. The amount of each particular currency issued to the end of 1907 is shown in the following table:—

Year.	Silver Coin.							Bronze Coin.
	Crowns and Double Florins.	Half-crowns.	Florins.	Shillings.	Six-pences.	Three-pences.	Total.	
1868 to 1897	£ 1,300	£ 126,600	£ 100,600	£ 132,000	£ 47,800	£ 68,300	£ 476,600	£ 45,440
1898	.....	21,800	7,000	5,000	1,000	5,000	39,800	3,940
1899	.....	19,200	17,000	10,000	8,000	7,600	61,800	2,830
1900	.....	50,000	40,000	25,000	13,000	11,400	139,400	4,100
1901	.....	25,000	23,000	24,000	5,000	6,400	83,400	5,500
1902	.....	200	1,050	1,000	4,800	4,800	11,800	3,000
1903	.....	2,400	4,200	2,800	1,400	5,200	16,000	3,720
1904	.....	23,600	6,800	200	5,600	7,000	43,200	2,320
1905	.....	3,800	.....	.....	3,600	3,400	10,800	2,000
1906	.....	35,000	15,000	12,000	8,600	8,000	78,600	4,000
1907	.....	68,000	55,000	30,000	14,800	10,000	177,800	10,000
Total ... £	1,300	375,600	269,600	242,000	113,600	137,100	1,139,200	86,850

It has already been pointed out that standard silver comprises .925 pure metal and .075 alloy. Standard silver of the weight of one pound troy is coined into sixty-six shillings—that is to say, 11·1 oz. of fine metal produces coin to the value of £3 6s. The average price of silver during 1907 was 2s. 6 $\frac{3}{4}$ d. per oz., which for 11·1 oz. gives the sum of £1 7s. 11 $\frac{1}{4}$ d.; and as the difference between the nominal value of silver and the average price per standard oz. represents the seigniorage or gross profit, it will be seen that after full allowance is made for mint expenses and the loss incurred by the purchase of worn silver at its nominal value, the British Government derives a fairly large profit from the silver coin issued in the Commonwealth. The demand for silver is, however, necessarily limited, the average annual issue of silver coin by the Sydney Mint for the twenty years ended 31st December, 1907, being about £40,600.

The gold bullion issued by the Mint is partly pure gold in small quantities for the use of jewellers, chemists, and others, but the bulk consists of small fine gold bars for export to India. The amount of gold bullion issued during 1907 was valued at £337,421, and the total to the end of 1907 at £5,846,811.

Worn gold coins have been received at the Mint for recoinage since 1876, and silver coins since 1873. The nominal value of gold coin withdrawn from circulation during 1907 was only £443, and for the whole period since the opening of the Mint, £828,338.

Silver coin of the value of £9,331 was withdrawn during 1907. The aggregate value of silver coin withdrawn was £246,101, and this was forwarded to London for recoinage.

The expense of the Sydney Branch of the Royal Mint is borne by the local Government, £15,000 being set apart annually for that purpose. Special votes for construction, repairs, and furniture have been passed occasionally.

The receipts of the Mint, which are paid into the Consolidated Revenue, comprise charges for coining gold, fees for assays, &c., and profits on sale of silver. The Mint pays for all silver contained in deposits in excess of 8 per cent. of the gross weight at a rate fixed by the Deputy Master from

time to time. On the 12th May, 1902, the rate was proclaimed at 1s. 6d. per oz. fine, and this is still ruling.

From the 1st January, 1901, amended regulations were adopted for the coinage of gold and the charges were considerably reduced. No distinction is made between gold raised in New South Wales and that raised in any of the other States.

The new regulations are as follow :—

For assaying and coining—1d. per oz. standard.

For melting and refining—

Deposits of 500 oz. and under—3d. per oz. gross ; deposits of over 500 oz. and under 1,000 oz.—2d. per oz. gross ; deposits of more than 1,000 oz.—1d. per oz. gross ; deposits containing more than 5 per cent. of base metal—1s. per oz. of base metal, in addition to the above charges for melting, &c. The minimum charge on any one deposit is 6s., except in the case of deposits containing more than 5 per cent. of base metal, when the minimum charge is 10s. 6d.

The total receipts of the Mint since its establishment in 1855 are shown below :—

Year.	Charges on Gold.	Profit on Sale of Silver.	Fees for Assays and Crushings, and Proceeds of Sweep.	Total Mint Receipts (paid into Consolidated Revenue).
	£	£	£	£
1855 to 1897	462,185	90,535	77,206	629,926
1898	6,811	3,896	2,726	13,433
1899	7,289	5,391	2,930	15,610
1900	7,538	7,855	3,464	18,857
1901	9,623	6,572	2,016	18,211
1902	8,108	5,254	2,034	15,396
1903	8,793	8,499	2,116	19,408
1904	11,145	8,869	1,725	21,739
1905	10,158	8,196	1,068	19,422
1906	9,083	7,846	2,565	19,494
1907	6,836	4,884	2,136	13,856
Total	547,569	157,797	99,986	805,352

#### LIFE ASSURANCE.

On account of the absence of official returns, the particulars relating to the institutions are obtained from the reports published and circulated by the companies themselves ; but, unfortunately, such statements do not allow of the business transacted locally being separated from that done elsewhere. During 1907 there were nineteen institutions operating in the State. Of these eight were local, five had their head offices in Victoria, one in New Zealand, one in the United Kingdom, one in Canada, and three in the United States. The volume of the local business of those last mentioned, proportionately to the total, is, however, so small that returns relating to the American offices have been omitted from the following comparisons, except where their local business can be stated. Eighteen companies, uniting life with other classes of insurance, have local branches or agencies, but their transactions in life risks in the State are unimportant.

Of the fourteen Australasian institutions, the Australian Mutual Provident Society and the Mutual Life Association of Australasia were incorporated under special Acts ; and the following were registered under the Companies

Act—the City Mutual Life Assurance Society (Limited) in 1879, the Citizens' Life Assurance Company (Limited) in 1886, the Standard Life Association (Limited) in 1899, the People's Prudential Assurance Company (Limited) in 1896, and the Phoenix Mutual Provident Society (Limited) in 1902. Of the remaining institutions five were incorporated in Victoria, one in Queensland, and one in New Zealand. During 1908, the Mutual Life Association of Australasia and the Citizens' Life Assurance Company (Limited) were amalgamated.

The results of the latest published actuarial investigations of the various societies were as follows :—

Institution.	Year when established.	Rate of Interest assumed in Valuation.	Date.	Net or present Liability.	Surplus.
Head Office in New South Wales—		Per cent.		£	£
Australian Mutual Provident Society	1849	3, 3½, 4 (a)	Dec., 1907	22,627,018	821,718
Mutual Life Association of Australasia	1869	3, 3½ (g)	Dec., 1904	1,728,398	140,376
City Mutual Life Assurance Society (Limited)	1879	4 (t)	Dec., 1906	315,361	8,935
Citizens' Life Assurance Company (Limited)	1886	{ Ord. 2½, 3 (a) Ind. 3½, (g) }	{ Dec., 1907 Dec., 1906 }	{ 1,357,594 528,315 }	{ 60,247 4,537 }
The Standard Life Association (Ltd.)	1899	{ Ord. 4 (g) Ind. 3½ (g) }	June, 1904	{ 9,164 6,326 }	{ 546 144 }
Australian Metropolitan Life Assurance Company (Limited)	1895	{ Ord. 3½ (g) Ind. 3½, (g) }	Aug., 1907	{ 11,461 26,663 }	{ *12,094 }
People's Prudential Assurance Company (Limited)	1896	{ Ord. 3½ (g) Ind. 3½ (t) }	Aug., 1907	{ 4,992 5,837 }	{ 1,401 }
Phoenix Mutual Provident Society (Limited)	1902	Ind. †	†	†	†
Head Office in Victoria—					
Australian Alliance Assurance Company	1862	3½ (t)	Dec., 1903	230,567	5,389
National Mutual Life Association of Australasia (Limited)	1869	3½ (t)	Sept., 1904	3,671,160	261,20
Australian Widows' Fund Life Assurance Society (Limited)	1871	3½ (g)	Oct., 1906	1,635,854	135,364
Colonial Mutual Life Assurance Society (Limited)	1874	3½ (g)	Dec., 1904	2,568,145	261,541
Australasian Temperance and General Mutual Life Assurance Society (Limited)	1876	{ Ord. 3 (g) Ind. 3 (g) }	Sept., 1905	{ 358,802 101,012 }	{ 18,745 3,358 }
Head Office in New Zealand—					
Provident Life Assurance Company	1889	Ind. 4 (g)	June, 1899	7,211	‡3,595
Head Office in Canada—					
Independent Order of Foresters	1877	4 (g)	Dec., 1902	10,989,712	\$9,774,443
Head Office in United Kingdom—					
Liverpool, London, and Globe Insurance Company	1836	3 (g)	Dec., 1898	4,891,268	†
Head Office in United States, America—					
Equitable Life Assurance Society of United States	1859	3, 3½, 4 (a)	Dec., 1905	70,826,804	12,773,375
Mutual Life Insurance Company of New York	1843	3½, 4 (a)	Dec., 1905	79,532,351	16,082,936
New York Life Insurance Company	1845	3, 4 (a)	Dec., 1905	77,074,364	10,857,007

(a) Annual. (t) Triennial. (g) Quinquennial.

\* Deficiency—The subscribed capital of the Company is also liable for assurance contract

† No information available.

‡ Deficiency.

\$ Apparent deficiency assuming that every policy-holder would be persistent until death at the rates in force without any increase or extra call whatever.

The net or present liability represents the present value of the sums assured in respect of whole life and endowment assurance, reversionary bonuses, endowments, and annuities in force at date of valuations, less the present value of the future pure premiums thereon.

Eleven of the companies are mutual, and the remainder are what is termed, in insurance parlance, "mixed"—that is, proprietary companies, dividing profits with the policy-holders; while eight of the institutions also transact industrial business, and one company, the Australian Alliance Assurance Company, conducts fire, marine, and guarantee insurance, and the Liverpool, London, and Globe, fire insurance. Most of the offices have representatives in all the Commonwealth States and New Zealand, and four institutions have extended their operations to London, and two also to South Africa.

The following table gives the total business in force in the ordinary branch of each society at the close of 1907; the item "Sums assured" means the sums payable, exclusive of reversionary bonuses, at death, or on attaining a certain age, or at death before that age:—

Institution.	Policies in force, exclusive of Annuities.	Sums Assured, exclusive of Bonuses and Annuities.	Bonus Additions.	Total, inclusive of Bonuses.	Annual Premium Income.
	No.	£	£	£	£
Australian Mutual Provident Society .. .. .	215,424	60,377,717	12,219,198	72,596,915	1,976,511
Mutual Life Association of Australasia .. .. .	27,429	6,728,577	323,689	7,052,266	241,300
City Mutual Life Assurance Society (Ltd.) .. .. .	13,323	1,714,127	68,683	1,782,810	70,004
Citizens' Life Assurance Company (Ltd.) .. .. .	47,563	6,736,869	336,202	7,073,061	253,27
The Standard Life Association (Ltd.)* .. .. .	4,808	627,520	2,752	630,282	28,472
Australian Metropolitan Life Assurance Company (Ltd.) .. .. .	1,788	149,151	1,252	150,403	7,117
People's Prudential Assurance Company (Ltd.)†† .. .. .	1,584	75,784	**	75,784	4,128
Australian Alliance Assurance Company .. .. .	698	243,515	22,018	265,533	6,963
National Mutual Life Association of Australasia (Ltd.)‡ .. .. .	76,839	18,680,494	1,097,683	19,778,177	635,189
Australian Widows' Fund Life Assurance Society (Ltd.)† .. .. .	26,474	5,535,741	392,634	5,978,425	212,835
Colonial Mutual Life Assurance Society (Ltd.) .. .. .	38,865	11,216,145	332,587	11,548,732	375,788
Australasian Temperance and General Mutual Life Assurance Society (Ltd.) ‡ .. .. .	21,830	2,436,103	49,992	2,486,095	91,073
Independent Order of Foresters § .. .. .	1,315	221,100	....	221,100	4,677
Liverpool, London, and Globe Insurance Company .. .. .	478	234,433		234,433	6,47
Equitable Life Assurance Society of the United States ¶ .. .. .	10,664	3,849,933	13,447	3,863,380	142,682
Mutual Life Assurance Company of New York ¶¶ .. .. .	4,736	1,916,972		1,916,972	70,328
New York Life Insurance Company ¶¶ .. .. .	7,397	2,769,725		2,769,725	106,458

\* 30th June, 1903. † 31st October, 1907. ‡ 30th September, 1907. § 31st December, 1906.  
 || Not available. ¶ Australasian business only. \*\* Included in previous column. †† 31st August, 1907.

The whole of the business transacted by the Phoenix Mutual Provident Society (Limited), and the Provident Life Assurance Company, is industrial.

The business in force at the end of 1907 in the State of New South Wales only, under similar headings to the preceding table is given below:—

Institution.	Policies in force, exclusive of Annuities.	Amount Assured, exclusive of Bonuses.	Bonus Additions.	Total.	Annual Premium Income.
	No.	£	£	£	£
Australian Mutual Provident Society	59,931	17,645,188	3,641,535	21,286,723	573,466
Mutual Life Association of Australasia	6,574	1,794,633	121,722	1,916,355	64,464
City Mutual Life Assurance Society (Ltd.)	8,166	1,029,687		.....	
Citizens' Life Assurance Company (Ltd.)	13,938	1,870,105	86,145	1,956,250	66,683
*Standard Life Association (Ltd.)	2,719	326,171	1,802	327,973	14,644
Australian Alliance Assurance Company	7	2,200	119	2,319	73
†National Mutual Life Association of Australasia (Ltd.)	12,549	2,636,358		.....	91,505
‡Australian Widows' Fund Life Assurance Society (Ltd.)	7,517	1,663,546	116,412	1,779,958	59,924
Colonial Mutual Life Assurance Society (Ltd.)	3,807	833,524	39,050	872,574	29,511
†Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	4,954	558,915	11,345	570,260	21,496
Australian Metropolitan Life Assurance Company (Ltd.)	869	72,322	454	72,776	3,333
Equitable Life Assurance Society of the United States	2,252	915,690	4,471	920,161	32,757
Mutual Life Insurance Company of New York	2,369	1,083,422		.....	38,753
New York Life Insurance Company	2,539	943,123		.....	35,615
Liverpool and London and Globe Insurance Company	175	78,411	¶	78,411	2,476
Independent Order of Foresters	346	63,300	.....	63,300	
§People's Prudential Assurance Co., (Ltd.)	1,534	75,784	¶	75,784	4,128

\* 30th June, 1908.

† 30th September, 1907.

‡ 31st October, 1907.

§ 31st August, 1907.

|| Information not available.

¶ Included in previous column.

The following table gives a summary of the new business completed during the past ten years by the twelve Australian offices represented in New South Wales. The assurance and endowment policies only are dealt with, as the annuity transactions are unimportant:—

Year.	Policies.	Amount Assured.		Annual Premiums.	
		Total.	Per Policy.	Total.	Per £100 of Assurance.
	No.	£	£	£	£ s. d.
1898	35,675	8,479,842	238	289,686	3 8 4
1899	39,434	9,039,315	229	294,476	3 5 2
1900	42,855	9,237,454	216	321,172	3 9 6
1901	43,004	9,069,130	211	328,086	3 12 4
1902	43,865	9,164,636	209	334,627	3 13 0
1903	44,504	9,624,405	216	349,410	3 12 7
1904	48,308	10,238,366	212	372,133	3 12 8
1905	49,736	10,731,768	216	398,565	3 14 3
1906	54,843	12,105,063	221	440,466	3 12 9
1907	60,716	13,143,741	216	474,069	3 12 2

The average sum assured was £216 in 1907, compared with £238 in 1898, while the annual premium for £100 has increased. It would seem from these two facts that the proportion of policies for large amounts has diminished, while the increase in the premium is accounted for by the growth of the

endowment-assurance business. At the present time, about 50 per cent. of the total assurance business is of this description, and it is evident that the combination of investment with insurance thus afforded has obtained a strong hold on the assuring public. The average sum assured per endowment policy is below that of the whole-life policies, while the average annual premium is higher, as many of the policies are for short terms. The new assurances effected during the year, less the void business or discontinuances, represent the annual additions to the sums assured; this is shown in the following comparison for the ten years ended 1907:—

Year.	New Assurances.	Void Business.	Net yearly increase to sums assured.
	£	£	£
1898	8,479,842	5,328,957	3,150,885
1899	9,039,315	5,053,752	3,985,563
1900	9,237,454	5,673,224	3,564,230
1901	9,069,130	5,712,665	3,356,465
1902	9,164,636	5,804,255	3,360,381
1903	9,624,405	6,007,494	3,616,911
1904	10,238,366	6,364,307	3,874,059
1905	10,731,768	7,139,977	3,591,791
1906	12,105,063	8,251,766	3,853,297
1907	13,143,741	6,268,404	6,875,337

The large increase for 1907 shown in the last column, is almost entirely due to the great expansion of the business of the Australian Mutual Provident Society.

The receipts of the societies are chiefly represented by the collections from premiums on policies and the interest arising from investments of the accumulated funds; while payments on account of policies matured and surrendered, cash bonuses, and expenses of management chiefly comprise the disbursements. The receipts and disbursements of each society during 1907 were as follows:—

Institution.	Class of Business.	Receipts.	Expenditure.	Excess Receipts (Addition to Funds).
		£	£	£
Australian Mutual Provident Society ...	Ord. ...	3,086,216	2,053,547	1,032,669
	Ind. ...	34,551	32,353	2,198
Mutual Life Association of Australasia ...	Ord. ...	340,858	249,242	91,616
City Mutual Life Assurance Society (Ltd.) ...	Ord. ...	82,763	54,306	28,457
Citizens' Life Assurance Company (Ltd.) ...	Ord. ...	299,002	120,918	178,084
	Ind. ...	235,086	138,590	96,496
*Standard Life Association (Ltd.) ...	Ord. ...	23,605	22,058	1,547
	Ind. ...	27,066	28,760	+1,694
Australian Alliance Assurance Company ...	Ord. ...	58,023	38,239	19,784
National Mutual Life Association of Australasia (Ltd.) ...	Ord. ...	898,253	532,321	365,932
Australian Widows' Fund Life Assurance Society (Ltd.) ...	Ord. ...	275,830	229,173	46,657
Colonial Mutual Life Assurance Society (Ltd.) ...	Ord. ...	483,486	358,378	95,108
Australasian Temperance and General Mutual Life Assurance Society (Ltd.) ...	Ord. ...	108,448	61,067	47,381
	Ind. ...	124,703	68,419	56,284
Australian Metropolitan Life Assurance Company (Ltd.) ...	Ord. ...	27,118	21,585	5,533
	Ind. ...			
People's Prudential Assurance Company (Ltd.) ...	Ord. ...	15,919	13,693	2,226
	Ind. ...			
Phoenix Mutual Provident Society (Ltd.) ...	Ind. ...	1,782	1,551	231
Provident Life Assurance Company ...	Ind. ...	20,358	16,150	4,208
Total ...	£	3,143,067	4,070,350	2,072,717

\* 30th June, 1908.

† Decrease.

The aggregate receipts and disbursements, under the accepted heads, for the twelve institutions were as follow, both ordinary and industrial branches being included, as a separation cannot be made in some cases:—

Receipts.		Expenditure.	
	£		£
Premiums—		Claims ... ..	2,391,457
New ... ..	475,656	Surrenders ... ..	473,354
Renewal ... ..	*3,786,510	Annuities ... ..	78,837
Consideration for Annuities ...	106,021	Cash Bonuses and Dividends ...	89,872
Interest ... ..	1,679,440	Expenses ... ..	949,695
Other Receipts (Rents, etc.) ...	95,440	Amount written off to Depreciation, Reserves, etc. ...	87,135
Total ... ..	£ 6,143,067	Total ... ..	£ 4,070,350

\* Includes Industrial premiums.

During the years 1898 to 1907, the additions to the funds have shown a considerable increase. The amount of funds and the interest received thereon, for the ten years ended with 1907, were as follow:—

Year.	Accumulated Funds.		Interest.	
	Additions during year.	Total Amount.	Amount received.	Average Rate realised.
	£	£	£	per cent.
1898	1,168,746	23,654,709	1,093,621	4·74
1899	1,476,215	25,130,924	1,119,525	4·59
1900	1,445,073	26,491,025	1,161,696	4·51
1901	1,441,288	27,932,313	1,224,120	4·50
1902	1,559,462	29,491,775	1,287,372	4·48
1903	1,586,315	31,088,090	1,360,292	4·49
1904	1,673,906	33,264,382	1,453,698	4·52
1905	1,603,317	34,915,842	1,527,690	4·48
1906	1,821,402	37,486,144	1,565,611	4·32
1907	2,072,717	39,558,861	1,679,440	4·36

The figures for 1899 include the business of the Standard Life Association (Limited) to 30th June, 1900. The total amount of accumulated funds for 1900 is exclusive of £99,332, the Investment Fluctuation Fund of the Colonial Mutual Life Assurance Society (Limited), which sum was included in previous years. It, however, includes £14,360, the amount of the funds of the Australian Metropolitan Life Assurance Company (Limited) at the 31st of August, 1899, which was not included in the total given for the previous year. The figures from 1904 include the funds of the industrial branches and other funds, which were not taken into account in previous years.

### ASSETS AND LIABILITIES OF THE ORDINARY BRANCH OF ASSURANCE COMPANIES.

The societies establish annually a statement of their liabilities and assets, with the object of showing the distribution of the accumulated funds and the amount placed to commercial reserve. The returns are, however, in no way connected with the valuation balance-sheets prepared at the date of the actuarial investigation. The assets and liabilities of each institution, for the financial year 1907, are shown in the subjoined table:—

Institution:	Class of Business.	Assets.			Liabilities.		
		Loans on Mortgages and Policies.	Securities, Freehold Property, etc.	Total.	Total Funds, including Paid-up Capital.	Other Liabilities.	Total.
Australian Mutual Provident Society	{ Ord. } { Ind. }	£ 16,728,057	£ 7,113,433	£ 23,841,490	£ 23,573,894	£ 267,596	£ 23,841,490
Mutual Life Association of Australasia	Ord. ..	1,510,138	671,718	2,181,851	2,157,599	24,252	2,181,851
City Mutual Life Assurance Society (Ltd.)	Ord. ..	239,377	120,163	359,540	352,753	6,787	359,540
Citizens' Life Assurance Company (Ltd.)	{ Ord. } { Ind. }	358,122	1,065,794	1,423,916	1,417,841	6,075	1,423,916
	Ind. ..	237,347	428,955	666,302	659,348	7,454	666,302
Standard Life Association (Ltd.)	{ Ord. } { Ind. }	1,594	23,375	24,969	22,261	2,708	24,969
	Ind. ..	1,785	42,155	43,940	42,890	1,050	43,940
Australian Alliance Assurance Company	Ord. ..	228,358	191,099	*417,457	†219,797	197,660	*417,457
National Mutual Life Association of Australasia (Ltd.)	Ord. ..	3,211,163	1,733,519	4,994,682	4,928,417	66,265	4,994,682
Australian Widows' Fund Life Assurance Society (Ltd.)	Ord. ..	1,384,728	419,416	1,834,144	1,818,941	15,203	1,834,144
Colonial Mutual Life Assurance Society (Ltd.)	Ord. ..	1,550,907	1,534,794	3,085,701	3,076,926	8,775	3,085,701
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	{ Ord. } { Ind. }	239,855	431,540	671,395	668,633	2,732	671,395
	Ind. ..						
Australian Metropolitan Life Assurance Company (Ltd.)	{ Ord. } { Ind. }	875	46,743	47,618	36,842	10,776	47,618
	Ind. ..						
People's Prudential Assurance Company (Ltd.)	{ Ord. } { Ind. }	6,049	11,180	17,229	17,015	214	17,229
	Ind. ..						
Phoenix Mutual Provident Society (Ltd.)	Ind. ..	Nil.	905	905	878	27	905
Provident Life Assurance Company	Ind. ..	13,238	22,210	42,448	21,133	21,315	42,448
Total .. .. .	....	25,710,038	13,943,999	39,654,087	39,015,198	638,889	39,654,087

\* Includes Fire, Marine, and Guarantee Branches.

Life Assurance Fund.

About 65 per cent. of the total assets are represented by loans on mortgage, and on the policies of the societies. In former years insurance companies were almost confined to these forms of investment, but recently more attention has been given to Government securities, loans to municipalities, and investments in shares; while considerable sums are deposited with the banks, or sunk in freehold and leasehold property. The remaining items require no special comment, except loans on personal security. Investments of this character are unusual in Australasia, the amount invested aggregating only £62,524, and the advances are generally combined with life policies. In some of the States the companies are obliged by law to deposit certain sums with the Treasury as a guarantee of good faith, and the amount so lodged is included either under the head of Government securities or of deposits.

### EXPENSES OF MANAGEMENT OF ASSURANCE COMPANIES.

The ratio of expenses of management to premium income and gross receipts must necessarily vary according to the age of the society and the proportion of new business transacted. The figures relate to the ordinary branch only, and are given for what they are worth. That a more exact comparison cannot be made is the fault of certain companies which fail to make a complete disclosure of their affairs, and do not distribute their expenses of

management so that the cost of new business may be distinguished from that of old business :—

Institution.	Expenses of Management.		
	Amount.	Proportion to—	
		Premium Income.	Gross Receipts.
	£	per cent.	per cent.
Australian Mutual Provident Society .. .. .	272,267	13·89	8·82
Mutual Life Association of Australasia .. .. .	50,263	20·40	14·75
City Mutual Life Assurance Society (Ltd.) .. .. .	18,875	29·14	22·81
Citizens' Life Assurance Company (Ltd.) .. .. .	24,190	10·00	8·09
The Standard Life Association (Ltd.) .. .. .	19,462	85·34	82·45
* Australian Metropolitan Life Association Company (Ltd.) .. .. .	14,691	60·47	54·17
* People's Prudential Assurance Company (Ltd.) .. .. .	7,122	46·41	44·74
Australian Alliance Assurance Company .. .. .	2,523	33·68	4·35
National Mutual Life Association of Australasia (Ltd.) .. .. .	156,120	24·04	17·38
Australian Widows' Fund Life Assurance Society (Ltd.) .. .. .	54,102	27·99	19·61
Colonial Mutual Life Assurance Society (Ltd.) .. .. .	105,563	29·08	21·83
Australasian Temperance and General Mutual Life Assurance Society (Ltd.) .. .. .	21,451	24·15	19·78

\* Includes Industrial Branch.

#### ASSURANCE IN VARIOUS COUNTRIES.

The average amount assured per policy for each State, and for New Zealand, the United Kingdom, Canada, and the United States, is given in the following table. The figures relate to the ordinary branch only, and in some instances are probably somewhat overstated, as all the companies do not show complete returns of the business in each State, but the results may be taken as a fair estimate for each province. The Australasian business of the American institutions, excluded from the previous returns, has been included for the purpose of establishing the Australian averages shown herewith :—

Country.	Average sum assured per Policy.
	£
Commonwealth of Australia .. .. .	246
New South Wales... .. .	262
Victoria .. .. .	224
Queensland .. .. .	262
South Australia .. .. .	216
Western Australia .. .. .	235
Tasmania .. .. .	251
New Zealand .. .. .	246
United Kingdom .. .. .	292
United States .. .. .	463
Canada .. .. .	323

The average amount of assurance per head of population was, in Australasia, £26; in Canada, £21; in the United Kingdom, £16; and in the United States, £26; while the average number of policies per thousand of population was, in Australasia, 106; in Canada, 63; in the United Kingdom, 51; and in the United States, 66.

The average policy is scarcely a fair measure of thrift. In these States mutual assurance is the rule, and members of the various societies have acquired large bonus additions. The average existing policy, including reversionary bonus, of the Australasian companies during 1907. was £276, as compared with the £246 shown in the comparative table.

It would seem that the practice of assuring life is much more prevalent in Australasia than in any of the other countries instanced; and although the average sum assured by each policy is less, the number of policies is so much greater, as compared with the population, that the amount assured per inhabitant is considerably higher.

## INDUSTRIAL ASSURANCE.

In addition to the ordinary life transactions mentioned in the foregoing tables, a large industrial business has grown up during the past few years. The policies in this class are usually for small amounts, and the premiums are, in most cases, payable weekly or monthly. The assurances may be effected on the lives of infants and adults, and the introduction of this class of business has proved of great benefit to the industrial population.

As already mentioned, there are six of the Australasian companies which combine industrial with ordinary business, while two limit their operations to industrial and medical benefit transactions. The balance-sheets of these companies, however, do not show sufficient information to admit of making a satisfactory comparison of the business transacted, as in some cases the two branches are not treated separately. At the close of 1907 the total business in force of the eight companies showing transactions in the industrial branch, was as follows:—

Company.	Date.	No. of Policies.	Sum Assured.	Annual Premiums.
			£	£
Australian Mutual Provident Society ...	Dec., 1907	25,423	726,979	44,329
Citizens' Life Assurance Company (Ltd.) ...	„, 1907	201,228	3,972,193	186,233
The Standard Life Association (Ltd.) ...	June, 1908	24,611	666,745	30,432
Australian Metropolitan Life Assurance Company (Ltd.) ...	Dec., 1907	12,318	411,821	19,163
People's Prudential Assurance Company (Ltd.) ...	Aug., 1907	4,682	103,211	13,731
Phoenix Mutual Provident Society ...	Dec., 1907	377	22,072	1,367
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)...	Sept., 1907	95,702	1,858,968	120,580
Provident Life Assurance Company ...	Dec., 1907	16,398	438,780	22,255
Total ...	.....	380,739	8,200,769	438,090

It will thus be seen that the average amount per policy for these companies was about £21 10s. 9d., while the average premium per policy amounted to £1 3s. per annum, or about 5½d. per week.

The following table shows the business in force in the State of New South Wales only, at the same dates as those given in the previous statement:—

Institution.	Date.	Policies in Force.	Amount Assured.	Annual Premium Income.
		No.	£	£
Australian Mutual Provident Society ...	31 Dec., 1907	7,365	210,187	12,876
Citizens' Life Assurance Company (Ltd.)	31 Dec., 1907	59,242	1,151,863	57,055
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	30 Sept., 1907	21,243	442,671	30,088
Standard Life Association (Ltd.) ...	30 June, 1908	15,438	407,258	18,730
Provident Life Assurance Company ...	31 Dec., 1907	1,503	40,566	2,066
Australian Metropolitan Life Assurance Company (Ltd.) ...	31 Dec., 1907	7,195	273,509	11,627
People's Prudential Assurance Company (Ltd.) ...	31 Aug., 1907	4,682	103,211	13,731
Phoenix Mutual Provident Society ...	31 Dec., 1907	127	2,211	183
Total ...	.....	116,795	2,631,476	146,356

The average sum assured and annual premium for the State are slightly higher than those for the Commonwealth, the former being £22 10s. 7d., and the latter £1 5s. 1d., or about 5½d. per week.

The total receipts and disbursements of the companies publishing the information separately are given below, the dates to which the figures relate being also shown :—

Company.	Date.	Receipts.			Disbursements.			
		Pre- miums.	Other.	Total.	Claims, Surrenders, and Cash Dividends.	Expenses of Manage- ment, Commis- sion on New Busi- ness, &c.	Other.	Total.
Australian Mutual Provident Society .. ..	Dec., 1907	£ 34,334	£ 167	£ 34,551	£ 1,639	£ 30,664	..	£ 32,353
Citizens' Life Assurance Com- pany (Ltd.) .. ..	Dec., 1907	185,435	49,651	235,086	57,769	80,821	..	138,590
Standard Life Association (Ltd.) .. ..	June, 1908	26,144	922	27,066	9,433	19,263	64	28,760
Phoenix Mutual Provident Society (Ltd.) .. ..	June, 1907	1,725	57	1,782	765	774	12	1,551
Australasian Temperance and General Mutual Life Assurance Society (Ltd.) ..	Sept., 1907	116,872	7,831	124,703	16,130	52,289	..	68,419
Provident Life Assurance Company .. ..	Dec., 1907	19,332	1,026	20,358	4,637	11,255	258	16,150
Total .. ..	.....	333,892	59,654	443,546	90,423	195,666	334	295,823

The figures quoted show that about 87 per cent. of the total receipts consists of premiums, the other sources of revenue being interest, rent, fines, &c. With regard to the disbursements, it will be noticed that a large amount was paid for expenses of management, commission, &c., the proportions under this head being :—

	Percentage of Total Income.	Percentage of Premium Income.
Australian Mutual Provident Society .. ..	88·75	89·18
Citizens' Life Assurance Company (Ltd.) .. ..	34·33	43·58
Standard Life Association (Ltd.) .. ..	71·17	73·68
Phoenix Mutual Provident Society (Ltd.) .. ..	43·43	44·87
Australasian Temperance and General Mutual Life Assurance Society (Ltd.) .. ..	41·93	44·74
Provident Life Assurance Company .. ..	55·28	58·22

The expenses of all societies transacting this class of business are invariably high, as a large staff of collectors and agents have to be employed, who are required to call at the homes of the assured for payments; but it may be said generally that the above ratios compare favourably with those of old-established societies in the United Kingdom and the United States of America.

#### FIRE INSURANCE.

The amount of the net risks held in the metropolitan area is obtainable under the 22nd clause of the Fire Brigades Act of 1902, which requires each company holding risks within the proclaimed area under the Fire Brigades Board to furnish annually to the Board the amount held at risk on the preceding 31st December within that area, less the sum reinsured with other contributory companies under the Act. This information, however, is for assessment purposes only, the companies being obliged to contribute one-third of the total annual expenditure of the Board, the sum subscribed by each being proportionate to the amount of net risks held within the said area. The total amount levied on the companies towards the expenses of the Board during 1908 was £17,400, from 59 companies.

The declared amount of risks held in the metropolitan district since the Fire Brigades Act came into force is shown below. The figures refer to the 31st December in each year :—

1884 ... £36,691,000	1892 ... £61,185,715	1900 ... £66,427,642
1885 ... 41,631,582	1893 ... 59,844,701	1901 ... 69,495,391
1886 ... 46,253,370	1894 ... 59,340,096	1902 ... 71,750,461
1887 ... 49,209,395	1895 ... 59,720,282	1903 ... 73,083,028
1888 ... 53,583,000	1896 ... 59,907,953	1904 ... 75,147,807
1889 ... 57,148,388	1897 ... 60,426,170	1905 ... 78,108,749
1890 ... 58,207,183	1898 ... 61,861,909	1906 ... 81,364,129
1891 ... 58,415,945	1899 ... 63,689,331	1907 ... 86,563,304

A summary of the receipts and disbursements of 42 of the fire insurance companies for the year 1907 is shown below. Eleven of these have their head offices in the Commonwealth, four in New Zealand, one in Canada, twenty-five in the United Kingdom, and one outside the British Empire. With regard to the remainder of the companies which contribute to the maintenance of the Fire Brigades Board, the purely marine offices, which carry fire risks on goods in transit, have been omitted, while in three cases the information is not available. The life assurance figures of those institutions which combine fire and life business have also been excluded where possible :—

Receipts.		Disbursements.	
	£		£
Premiums (less reinsurances) ...	34,563,629	Losses ...	17,663,873
Interest, rent, fees, &c. ...	1,741,488	Expenses of management, &c. ...	12,591,944
Total ...	36,305,117	Total ...	30,255,817

The total liabilities and assets of the same companies were as follows :—

Liabilities.		Assets.	
	£		£
Paid up Capital ...	9,716,533	Investments, including accrued interest ...	66,063,903
Reserve Funds, &c. ...	20,063,841	Real Estate ...	11,304,365
Balance of Profit and Loss Account ...	7,015,984	Other Assets ...	12,381,592
Other Liabilities ...	52,953,502		
Total ...	89,749,860	Total ...	89,749,860

#### FRIENDLY SOCIETIES.

The first Act of Parliament to regulate Friendly Societies was passed in 1843. By it certain legal advantages were granted to societies established for the purpose of raising funds for mutual relief of the members. This measure contained many serious defects—no provision was made to enforce correlation of contributions to benefits, or for obtaining periodic financial statements from the societies, and no officer was specifically appointed to supervise the administration of the Act.

It was not until 1873 that a Registrar of Friendly Societies was appointed to certify as to the accordance of the rules of the societies with the law. To obtain the registration of a society under the Act of 1873, the table of contributions, certified by an actuary, was essential; but this clause was rendered useless by the fact that the society had the power, after registration, to alter the rates of subscription and the amount of benefits.

A commission, appointed in 1881, held an investigation into the working of the Act, and a series of valuations of the positions of the societies disclosed a condition of insolvency in all cases.

No attempt was made to carry out recommendations made by the Commissioners until 1899. Under the Act passed in that year the Friendly Societies had offered to them the supervision of the State in the conduct of their business, and in the safeguarding of their funds, collection of data as to membership, sickness and mortality experience, investigation of accounts, and, above all, expert advice on their financial concerns, and the actuarial oversight obtained by means of periodic valuations.

A period of one year was allowed, after which the old rules would become obsolete by effluxion of time. The vital question of adequacy of contributions was now raised, and the necessity for actuarial certification of scales of payments. The old members, who had practically arranged their own contributions, and had developed into an attitude, either of indifference, or of bitter hostility to actuarial presentments, as an inevitable consequence, consented to the apportionment of adequate payments in respect of future members. But they strongly protested against any increase in their own rates of contribution, although it was obvious, that, if certain periodic payments were essential on the part of new members as at entry age, even greater payments were necessary on the part of the old members, who would enjoy the same benefits, in order to counterbalance the deficiency of contribution in the past.

Eventually an Act was passed in 1901 as a compromise. It enacted that all societies subsisting at the commencement of the Act of 1899 might be registered if provision was made for keeping the accounts of contributions and benefits of old members separate from those of future members; that new members should pay at actuarially certified rates, while the rates of old members must not be less than those formerly payable, provided that such registration should remain in force until the next quinquennial investigation when any Society might be again registered, (1) if it appeared as the result of such valuation that the Society had improved its financial position in respect of persons, who were members at the last preceding registration; and (2) though it appeared that the Society had not so improved its financial position, if the rules of the Society provided that the rates of contribution to be charged in respect of such members were certifiable by an Actuary.

A further important amendment, enacted in 1906, required compulsory registration of all Friendly Societies, with the exception of those bodies—commonly termed dividing societies—which annually distribute all their funds amongst their members.

The first quinquennial valuation of Friendly Societies required in compliance with the Act of 1899, was undertaken as at 31st December, 1904. Eighteen affiliated societies and thirteen single societies were valued.

The benefits promised are much the same in all societies, and usually comprise medical attendance and medicine for a member and his family, and sick pay. For sickness benefit it is usual to offer 20s. to 21s. per week during the first six months, and half pay for the next six months' illness. Then in some Societies sick pay ceases for one or two years, but, in others, provision is made for further pay at quarter rates, for one or two years. The funeral benefits range from £20 to £40 at death, with a contingent benefit of £10 or £15 on death of the wife. A separate benefit for widows, usually £10, may in some Societies be assured for a stated contribution.

At the first valuation 96,422 members were valued for sickness benefit, and 97,511 for funeral benefits, with 51,155 subsidiary funeral benefits. The

valuation was made on a 3 per cent. basis on the experience of the M.U.I.O.O.F. of England, 1866-70.

Taking into account only the large affiliated Orders, 18 in number, the results show that 8 of them possessed a surplus amounting in the total to £28,967, and in the remaining 10 instances there were deficiencies representing an aggregate amount of £289,997. There was, consequently, a net deficiency of £261,030, in respect of total liabilities of £3,904,545. Of the single Societies 3 showed small surpluses, amounting in the aggregate to £346, and 13 had deficiencies amounting to £10,936. Dealing with the figures for all societies, there was a net deficiency of £271,620, on a total liability of £3,981,252, equal to 1s. 4d. per £1, or in other words, only 18s. 8d. was available to meet each £1 of liability.

In order to strengthen the financial position of the societies, and to improve their status, the Registrar in his Report of the valuation, recommended the societies to exercise close watchfulness of finances as to collection and allocation of contributions, as to investments, and the payment of benefits; to demand adequate rates of contributions for every benefit quoted; and to consolidate the resources of every society under the control of a central committee. The recommendations also advised careful selection of new members as to soundness of health, the preparation of tables of benefits in accordance with the average earnings of members; and the payment of a special premium by members engaged in hazardous occupations. By these measures efficient management of the finances would be secured, high sickness and mortality rates lessened, and imposition and malingering prevented.

The following table shows the progress in the number of societies, branches, and members, during the five years ended 31st December, 1907:—

Year ended 31st December.	Branches.	Members.
	No.	No.
1903	1,023	94,044
1904	1,139	97,952
1905	1,195	101,463
1906	1,299	106,220
1907	1,333	116,985

The receipts and expenditure of the societies for the five years ended 31st December, 1907, are set forth in the following statement:—

Year.	Receipts.					Expenditure.					Excess of Receipts.
	Sick Fund.	Funeral Fund.	Medical and Manage- ment Fund.	Ad- di- tional Funds.	Total.	Sick Fund.	Funeral Fund.	Medical and Manage- ment Fund.	Ad- di- tional Funds.	Total.	
	£	£	£	£	£	£	£	£	£	£	£
1903	116,940	43,002	123,674	17,946	306,562	81,635	24,010	125,806	7,979	230,430	67,132
1904	139,603	59,149	157,883	9,506	366,141	109,338	26,726	161,556	35,426	333,046	33,095
1905	149,495	60,015	170,890	10,066	390,466	103,910	26,844	175,633	8,105	314,492	75,974
1906	144,702	60,726	180,240	10,359	396,027	93,093	26,005	172,833	7,269	299,200	96,827
1907	163,438	86,381	175,075	9,106	434,000	111,705	25,764	163,352	15,660	321,481	112,519

The total cases of sickness in 1907 were 22,504, at a total cost of £96,129, or an average amount of sick pay of £4 7s. 5d. per member. The total receipts were £434,000, and the expenditure amounted to £321,481.

The total funds of the Friendly Societies at the end of 1907 amounted to £1,171,343, and were invested as follows :—

Classification.	Sickness Fund.	Funeral Fund.	Medical and Management Fund.	Other Funds.	Total.
Invested—	£	£	£	£	£
Mortgage ... ..	236,456	250,466	9,619	4,951	501,492
Public Funds ... ..	21,659	33,546	569	30	55,804
With District or Grand Lodge..	19,525	.....	1,799	867	22,191
Savings Banks ... ..	207,446	93,011	21,150	7,605	329,212
Other Banks ... ..	18,611	10,354	1,074	45	30,084
Purchase of Buildings ...	76,438	21,521	27,422	1,776	127,157
Other Freehold Property ...	19,283	1,112	1,418	1,002	22,815
Other Investments ... ..	10,675	3,320	1,662	274	15,931
Uninvested—					
Cash not bearing Interest ...	36,706	11,459	17,349	4,194	69,708
Illegally in use ... ..	7,901	950	301	77	9,229
Overdraft ... ..	(-) 653	(-) 119	(-) 11,469	(-) 39	(-) 12,280
Total ... ..	654,047	425,620	70,894	20,782	1,171,343

In order to assist aged and afflicted members individually, and to enable societies to enlarge their sphere of usefulness, Parliament in 1908 passed the Subventions to Friendly Societies Act, under which sums are payable by the State to those societies which elect to take advantage of the Act. These subventions are as follows :—

1. Sick pay—

- (a) One half the total cost in each year in respect of all sickness after twelve months from the commencement of such sickness—subject to a maximum cost to the State of 5s. per week for each case of prolonged sickness.
- (b) The whole cost of sick pay in respect of male members aged 65 years and over and of female members aged 60 years and over—the cost to the State not to exceed five shillings per week in each case.

2. The contribution payable on account of all male members 65 years and over, and of female members 60 years and over, for medicine and medical attendance, provided that such contributions shall not be more than those payable by members of the same society under the ages stated.

3. The contributions payable under the rules of a society in respect of such aged members as above mentioned to assure payment of funeral allowance at their death.

Hitherto, in all Friendly Societies, the provision for what is termed chronic sickness, has been a source of perplexity on account of the cost involved and the consequent necessity of higher contributions if such provisions were adopted. The means of the majority of the members require that the contributions shall be as small as possible, consistent with due consideration for the societies' solvency, and it has been felt in every society that provision for monetary allowances throughout chronic sickness could not be made on account of the undue cost. With the help afforded by the State under the terms of the Subventions Act, this difficulty is dispelled, and afflicted members of the societies will receive financial aid as long as their sickness lasts. The payment of medical and funeral contributions by the State on behalf of aged members will be a great boon to many. Up to the present fully two-thirds of these members have been forced to withdraw from the societies, through their inability to contribute their subscriptions when

their powers of earning had failed through old age. This means that medical benefits had to be surrendered at the time they were most necessary (for in old age sickness is more or less chronic) and prospective funeral benefits lost as the time for their realisation drew near. These hardships will be obviated by the subventions payable under the Act, and therefore appreciable benefit may be anticipated under its operation.

In addition to the Friendly Societies properly so called, some of the registered Trade Unions give benefits analogous to those of the societies mentioned above. The benefits, however, are usually smaller in amount, seldom exceeding 12s. a week for sick pay, and £7 in case of death. A few Trade Unions also make allowances to their members when they are out of employment.

#### MONEY ORDERS AND POSTAL NOTES.

The money order and postal note systems are worked in conjunction with the Post and Telegraph Department. Under the money order system, money may be transmitted from the principal post offices of New South Wales to any part of the world. The orders are sent either direct to the place of payment or through intermediary agencies, all places within New South Wales or the neighbouring States being dealt with direct, while to places outside Australia the intermediary system is applied. Under the postal note system exchanges are effected throughout the Commonwealth; but its original object was to afford means of transmitting small amounts of less than £1 to places within the State. As regards small remittances within the State, the money order and postal note systems cover somewhat the same ground; but as the public convenience is amply met by the postal note, it is anticipated that the money order system will be confined almost entirely to business involving amounts exceeding £1.

The money order system was adopted in January, 1863. In that year there were three orders issued for every hundred persons in the State, and the total value of the orders was £53,862; while in 1907 the number had risen to 39 per 100 inhabitants, and the total value to £2,433,897. The growth of the business has been due mainly to the extension of the sphere of operations in and beyond the State, and to the greater appreciation of the system, especially by the wage earning class of the community. Appended is a statement of the business transacted in 1907 by means of money orders:—

Issued in New South Wales.			Paid in New South Wales.		
Payable in—	Number	Value.	Issued in—	Number	Value.
Commonwealth of Australia—		£	Commonwealth of Australia—		£
New South Wales	483,508	2,015,332	New South Wales	476,329	2,012,735
Victoria	33,675	126,002	Victoria	16,753	71,801
Queensland	12,166	54,485	Queensland	33,334	111,693
South Australia	14,568	53,303	South Australia	7,153	30,123
Western Australia	4,337	24,333	Western Australia	13,773	66,706
Tasmania	3,114	13,685	Tasmania	6,715	25,412
New Zealand	7,923	25,135	New Zealand	33,015	87,476
United Kingdom	33,441	73,180	United Kingdom	14,357	43,639
Germany	1,077	4,136	Germany	491	2,280
Italy	867	4,009	Italy	52	395
Canada	300	1,036	Canada	549	2,136
United States	4,270	8,536	United States	3,274	17,456
India	1,555	18,265	India	502	1,996
Cape Colony	372	1,256	Cape Colony	860	3,052
German New Guinea	6	52	German New Guinea	188	1,012
Hong Kong	769	3,741	Hong Kong	372	999
Samoa	15	37	Samoa	603	6,256
Natal	124	420	Natal	431	1,925
Tonga	15	40	Tonga	196	2,185
Fiji	145	633	Fiji	2,731	8,029
Transvaal	202	945	Transvaal	1,420	6,751
Other	302	1,036	Other	517	2,237
Total	902,751	2,433,897	Total	618,665	2,506,484

The following table covers a period of ten years, and distinguishes orders drawn on New South Wales from those drawn on other countries. It will be seen that the amount of money transmitted to countries outside New South Wales was exceeded by the money received from other countries in every year of the decennial period. In the months of August, September, and October, large numbers of shearers are at work in various parts of the State; many of them are but temporary visitors, whose homes are in Victoria and other adjoining States, and during their stay in New South Wales they transmit a portion of their earnings to their families, so that the balance of exchanges, so far as Victoria is concerned, is habitually against New South Wales. There is also a considerable remittance from the State to Great Britain and Ireland, representing aid sent to relatives. On the other hand bread-winners belonging to New South Wales, but now seeking their fortune elsewhere, make remittances to their families who have remained behind; the principal remittances of this kind are received from New Zealand, Western Australia, Queensland, and Cape Colony:—

Year.	Issued in New South Wales.			Paid in New South Wales.		
	Drawn on New South Wales.	Drawn on other Countries.	Total.	Issued in New South Wales.	Issued in other Countries.	Total.
	£	£	£	£	£	£
1898	1,062,350	309,377	1,371,727	1,062,816	369,557	1,432,373
1899	1,120,804	316,123	1,436,927	1,118,518	348,084	1,466,602
1900	1,182,554	325,413	1,507,967	1,178,713	362,822	1,541,535
1901	1,295,122	342,366	1,637,488	1,290,929	378,801	1,669,730
1902	1,436,625	324,524	1,761,149	1,440,190	371,873	1,812,063
1903	1,454,084	318,102	1,772,186	1,442,581	392,714	1,835,295
1904	1,517,976	316,958	1,834,934	1,514,235	408,552	1,922,787
1905	1,746,866	329,280	2,076,146	1,757,229	425,400	2,182,629
1906	1,915,896	351,241	2,267,137	1,910,183	440,115	2,350,298
1907	2,015,332	418,565	2,433,897	2,012,735	493,699	2,506,434

A commission is paid to those countries to which money is transmitted in proportion to the amount of the orders forwarded to each, the rate of commission varying from  $\frac{1}{2}$  to 1 per cent., and a similar allowance is made to the State by countries doing a return business.

The maximum amount of a single order is £40 in respect of the United Kingdom, Germany (including Samoa and other German protectorates), Canada, Fiji, New Zealand, Cape Colony, Orange River Colony, Transvaal, Natal, Hongkong, India, Ceylon, Straits Settlements, Egypt, Peru, and the British Protectorate of Somaliland; but no single order payable in Italy, or the United States is issued for more than £20; to all other places the limit is £10. The rates of commission on money orders payable in the Commonwealth and Papua are respectively 6d. and 9d. for every £5. The charges on those payable in New Zealand and Fiji are—not exceeding £2, 6d.; £2 to £5, 9d.; each additional £5 or fraction thereof, 9d. The commission on orders payable in the United Kingdom, other British Possessions, and foreign countries, is at the rate of 6d. for each pound.

The total amount of commission collected from the public for each of the ten years from 1898 to 1907 is given below, and also the excess of receipts over payments shown in the preceding table:—

Year.	Commission received.	Net Receipts from Other Countries.	Net Collections.
	£	£	£
1898	15,110	174	15,284
1899	15,874	39	15,913
1900	16,296	51	16,347
1901	17,650	12	17,662
1902	19,016	93	19,109
1903	19,265	112	19,377
1904	19,091	174	19,265
1905	19,313	419	19,732
1906	19,377	438	19,815
1907	20,251	316	20,567

Postal notes were first issued in New South Wales on the 1st October, 1893. The transactions for the ten years ended 1907 were as follow:—

Year.	New South Wales Postal Notes.			Postal Notes of other States of Australia paid in New South Wales.					
	Paid in New South Wales.	Paid in other States.	Total Value.	Issued in—					Total Value.
				Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	
	£	£	£	£	£	£	£	£	£
1898	396,224	23,888	420,112	10,713	7,636	1,773	....	712	20,834
1899	424,645	25,303	449,948	11,613	10,301	2,118	....	979	25,011
1900	462,067	26,396	488,483	12,207	9,899	2,209	....	1,047	25,362
1901	432,067	26,365	508,432	12,652	9,300	2,529	163	1,029	25,673
1902	472,684	33,474	506,158	18,845	12,899	4,538	3,202	1,880	41,364
1903	525,423	56,181	581,604	23,343	17,833	5,222	5,855	3,098	55,351
1904	581,931	73,540	655,471	27,013	21,115	5,844	7,081	3,697	64,750
1905	637,465	85,703	723,168	35,034	28,535	8,752	9,170	5,712	87,203
1906	710,053	98,706	808,759	36,672	34,616	10,092	10,347	6,193	97,920
1907	776,931	117,343	894,274	37,282	38,177	11,893	11,083	6,694	105,129

No commission is paid by one State to another in respect of notes obtained for interstate use, but revenue is secured by the charge of poundage both by the State in which a note is issued and by that in which it is cashed. The poundage collected in New South Wales during the last ten years was as follows:—

Year.	Amount.	Year.	Amount.
	£		£
1898	10,099	1903	11,627
1899	10,966	1904	12,921
1900	11,850	1905	14,262
1901	12,141	1906	15,961
1902	11,022	1907	17,615

#### BANKRUPTCY.

Prior to the 1st January, 1888, the transactions in insolvency were carried out under a Commissioner of Insolvent Estates, but under the Act of 1887, and subsequent amending Acts, which were consolidated under the Act of 1898, the law is administered by a Supreme Court Judge in Bankruptcy. On the passage of the Act of 1887 it was anticipated that a much healthier tone in trade would ensue, and that there would be a considerable reduction

in the number of debtors who would have recourse to the law to relieve them of their obligations. The impression then formed was not realised in the earlier years of the operation of the Act, and sequestrations were quite as numerous as under the repealed Act. A decided improvement, however, has taken place since 1893. During the twenty years currency of the present law 17,618 petitions in bankruptcy have been received; of these 14,794 were filed by the bankrupts themselves, and 2,824 on behalf of creditors. In 705 cases the petitions were either refused or withdrawn, leaving the total sequestrations actually made at 16,913. The following statement shows the number of bankruptcy petitions for each of the last five years:—

Year.	Petitions in Bankruptcy.			Petitions withdrawn, refused, etc.	Sequestration Orders granted.
	Voluntary.	Compulsory.	Total.		
1903	366	117	483	20	463
1904	352	139	491	30	461
1905	332	106	438	17	421
1906	337	91	428	22	406
1907	256	111	367	34	333

A regular decrease in the number of sequestrations has taken place since the financial crisis of 1893, the total for 1907 being only one-fifth of that in the former year, and even 490 less than in the fairly prosperous year of 1888. Taken in conjunction with the increase in the savings of the people, and the position disclosed by the life assurance returns, this is a further indication of the growing prosperity of the State.

The estates in respect of which certificates of discharge or release were granted during the time the Act has been in force numbered 2,247, or more than 13 per cent. of the total sequestrations. In some few cases application is made for a certificate and refused; taking these into consideration it would appear that out of 100 bankrupts, 86 are unable or too indifferent to take the necessary steps to free themselves from bankruptcy. The property of an uncertificated bankrupt, even if acquired subsequently to sequestration, is liable to seizure on behalf of unsatisfied creditors, and as applications for certificates of discharge are apparently the exception rather than the rule, it would appear that the great majority of bankrupts do not attain a position in which they are likely to be disturbed by unsatisfied creditors. The number of sequestrations during the twenty years the Act has been in force was 16,913, and of these 14,601 remain uncertificated. During 1907 the total number of sequestrations was 333; the liabilities, according to bankrupts' schedules, were £219,669, and the assets amounted to £152,454. The qualification "according to bankrupts' schedules" is necessary, as the returns of assets and liabilities established after investigation by the Court differ widely from those furnished by bankrupts:—

Quinquennial Period.	Sequestrations.	Nominal—		
		Liabilities.	Assets.	Ratio of Assets per £1 of Liability.
	No.	£	£	£ s. d.
1888-1892	5,730	5,682,689	2,644,382	0 9 4
1893-1897	6,235	5,760,282	3,406,148	0 11 10
1898-1902	2,864	2,159,659	994,808	0 9 3
1903-1907	2,084	1,359,121	781,108	0 11 6
Total ...	16,913	14,961,751	7,826,441	0 10 6

The dividend rates paid on the amount of proved liabilities of estates which have been wound-up are not given, as it would involve an investigation of the transactions in each estate; and even this operation would not result in complete returns, as there are estates which remain unsettled over many years. There are official assignees to assist the Court in winding-up the estates. Each official pays all money received by him to the Registrar in Bankruptcy, who places the amount to the credit of the Bankruptcy Estates Account, from which all charges, fees, and dividends are met. The official assignees are required to furnish quarterly statements of the transactions in each estate.

On the 30th June, 1907, there remained to the credit of the Bankruptcy Unclaimed Dividend Fund £3,694, and to the Bankruptcy Suitors' Fund, to which account interest earned by the Unclaimed Dividend Fund is placed, the sum of £2,261.

District Registrars in Bankruptcy have been appointed throughout the State, and in most instances the positions are filled by Police Magistrates or other court officials. District Registrars have the same powers and jurisdiction as the Registrar in respect to examinations of bankrupts and the technical business of the court.

#### TRANSACTIONS IN REAL ESTATE.

The Real Property or Torrens Act was passed in 1862, transactions in real estate previously having been regulated by the Deeds Registration Act of 1843. The Real Property Act completely altered the procedure in regard to land transfers, and was modelled on the lines of legislation in South Australia adopted at the instance of Sir R. R. Torrens. The chief features of the Act are the transfer of real property by registration of title instead of by deeds; the absolute indefeasibility of the title when registered; and the protection afforded to owners against possessory claims, as a title issued under the Act stands good notwithstanding any length of adverse possession. From the passing of Torrens Act all lands sold by the Crown were conveyed to the purchasers under its provisions, and the provisions of the old law were restricted to transactions in respect of grants already issued. The area for which grants under the old system had been issued prior to 1862 was 7,478,794 acres; of these grants 1,639,228 acres have since been brought under the provisions of Torrens Act, so that the area still under the old Deeds Registration Act is 5,839,566 acres.

Lands may be placed under Torrens Act only when their titles are unexceptional; and as thousands of acres are brought under the Act during the course of every year, it is merely a question of time when the whole of the lands of the State will be under a uniform system. The area of Crown lands conveyed, and of private lands brought under the Real Property Act during the decade ended 1907 was as follows:—

Year.	Area.			Value.		
	Crown Lands.	Private Lands.	Total.	Crown Lands.	Private Lands.	Total.
	acres.	acres.	acres.	£	£	£
1898	434,692	25,169	459,861	236,090	662,888	898,978
1899	551,585	59,644	611,229	396,315	776,863	1,173,178
1900	526,381	47,224	573,605	427,285	837,315	1,264,600
1901	764,431	56,877	821,303	641,361	692,641	1,334,002
1902	897,591	46,678	944,269	813,015	1,089,235	1,902,250
1903	1,403,994	56,492	1,460,486	1,181,102	1,045,780	2,226,882
1904	1,557,667	38,890	1,596,557	1,109,688	907,371	2,017,059
1905	1,834,802	55,251	1,890,053	1,391,255	725,508	2,115,763
1906	1,743,210	98,722	1,841,932	1,486,489	968,449	2,454,938
1907	1,750,597	54,205	1,804,802	1,552,049	1,349,351	2,901,400

For the whole period during which the Real Property Act (Torrens) has been in operation, 29,149,520 acres, valued at £31,327,788, have been conveyed under its provisions; and 1,639,228 acres, valued at £27,818,457, have been brought under it, deeds under the old Act to the same extent having been cancelled.

The transfers and conveyances of private lands which take place during ordinary years indicate in some measure the condition of business; the volume of these transactions, however, in some years cannot be relied upon as giving more than an indication of speculation or inflation. In the following table, which covers ten years, there is shown the consideration money paid on sales of private lands during each year, excluding, of course, lands sold on long terms. During 1888 land to the value of £11,068,873 changed hands, but in 1905 the amount had fallen to £6,865,053, while in 1907 the total for the year was £12,708,589. As in the previous year these transactions involved property worth £10,167,014, it is apparent that there is an upward tendency of a permanent character having no resemblance to the boom which terminated about 20 years ago. The year 1888 marked the last of the boom period, when land speculation proceeded on a scale of unexampled recklessness. The other extreme was reached in 1897, when the value of the land transferred was only slightly more than in 1877, and nearly £1,000,000 less than in 1896. The year 1907 showed a greater activity than any previous year, and it is evident that transactions in land still very largely represent conveyances by mortgagors and mortgagees, genuine speculation in land having almost wholly died out:—

Year.	Conveyances or Transfers.		
	Under Old System.	Under Real Property (Torrens) Act.	Total.
	£	£	£
1898	1,275,316	2,251,140	3,526,456
1899	1,873,076	3,099,279	4,972,355
1900	2,265,901	3,444,209	5,710,110
1901	2,263,853	3,986,229	6,250,082
1902	2,519,247	4,350,050	6,869,297
1903	3,316,360	4,025,286	7,341,646
1904	2,524,799	4,138,994	6,663,793
1905	2,197,031	4,668,022	6,865,053
1906	2,820,456	7,346,558	10,167,014
1907	3,342,526	9,366,063	12,708,589

As already mentioned, the Real Property Act provides that on the issue of a certificate the title of the person named on the certificate is indefeasible. Provision is made, however, for error in transfer, by which persons might be deprived of their rightful property, as should the transfer be made to the wrong person the holder of the certificate cannot be dispossessed of his property unless he has acted fraudulently. To enable the Government to compensate persons who, through error, may have been deprived of their properties, an assurance fund has been created by means of a contribution of one half-penny in the pound on the declared capital value of property when first brought under the Act, and upon transmissions of titles of estates of deceased proprietors. It is an undeniable proof of the value of the Act, and the facility of its working, that payments from the assurance fund to the 31st December, 1907, in respect of titles improperly granted,

amounted to only £16,326. The amounts paid into the Treasury on account of the assurance fund during each of the ten years ended 1907 were as follow :—

Year.	Collections, less Refunds.	Compensation and Cost of Legal Actions.	Amounts Credited to Fund.
	£	£	£
1898	4,808	2	4,806
1899	5,272	324	4,948
1900	4,284	12,414	.....
1901	4,738	113	4,625
1902	5,703	20	5,683
1903	7,688	200	7,488
1904	7,162	58	7,104
1905	7,273	.....	7,273
1906	14,308	33	14,275
1907	13,900	112	13,788

The assurance fund amounted to £236,395 at the 30th June, 1905. Securities amounting to £156,090 were handed over to the State Debt Commissioners in the succeeding year, leaving at the close a balance of £94,580. In 1907 the assurance fund, as a separate account, was closed, and the balance at credit, £157,569, was transferred to the Closer Settlement Account in accordance with the provisions of section 6 of the "Public Works and Closer Settlement Funds Act, 1906." Since then all assurance contributions under Section 119 of the "Real Property Act, 1900," and claims for compensation in pursuance of that Act, are respectively paid to and discharged from the Closer Settlement Fund. The assurance fund in 1907, and prior to its absorption, was augmented by the redemption of £58,600 N.S.W. debentures. This, in effect, amounted to a refund of part of the amount handed over to the State Debt Commissioners in the previous year.

#### MORTGAGES.

All mortgages, except those regulated by the Bills of Sale Act of 1898 and the Merchant Shipping Act of 1894, are registered at the Registrar-General's Office, and it is a fair assumption that the number recorded represents the bulk of the mortgages effected. Where more than one mortgage has been effected on the same property, the mortgages take priority according to the time of registration, and not in accordance with the respective dates of the instruments. The amount of consideration for which a mortgage stands as security is not always stated in the deeds, the words "valuable consideration" or "cash credit" being inserted instead of a specific sum in many of the transactions of banks and other loan institutions, in cases where the advances made are liable to fluctuation; and as this frequently occurs when the property mortgaged is of great value, an exact statement of the total advances against mortgages cannot be given. It must be borne in mind, therefore, that the figures in the tables given below refer only to cases in which a specific amount is stated in the deeds, whether that amount be the sum actually advanced or not. What is true of mortgages registered holds good for discharges, the amount of which, as shown in the tables, is still further reduced by the exclusion of mortgages which have been satisfied by foreclosure or seizure, a record of which is not available. Many mortgages, therefore, appear in the official records as current, notwithstanding that the property which they represent has passed away from the mortgagor.

## MORTGAGES OF REAL ESTATE.

Mortgages of land are registered either under the Deeds Registration Act, or the Real Property Act, according to the Act under which the title of the property stood at the date of mortgage. The mortgages registered for each of the five years ended 1907 were:—

Year.	Number.			Consideration.		
	Under Deeds Registration Act.	Under Real Property Act.	Total.	Under Deeds Registration Act.	Under Real Property Act.	Total.
	No.	No.	No.	£	£	£
1903	4,346	6,320	10,666	4,199,853	6,273,535	10,473,388
1904	3,906	6,387	10,293	3,714,248	6,292,235	10,006,483
1905	3,921	7,220	11,141	3,207,238	6,437,963	9,645,201
1906	3,996	8,062	12,058	3,953,679	7,814,309	11,767,988
1907	4,642	8,783	13,425	5,621,296	8,885,375	14,506,671

The consideration given generally represents the principal owing; in some cases, however, it stands for the limit within which clients of banks and other loan institutions are entitled to draw, though many of these clients may be in credit while their property is mortgaged and unreleased.

The amount of mortgages discharged has always been much less than the amount registered, for, as previously mentioned, the discharges do not include foreclosures, which if not formally registered as discharges are nevertheless mortgages cancelled. The volume of the releases is also reduced by mortgages paid off in instalments, as the discharges may be given for the last sum paid, which might happen to bear a very small proportion to the total sum borrowed; and, further, the total of discharges is reduced owing to the practice, now largely followed, of allowing mortgages maturing on fixed dates to be extended for an indefinite period.

## MORTGAGES ON LIVE STOCK AND WOOL.

Liens on wool, mortgages on live stock, and liens on growing crops are registered under special Acts, the first two mentioned under a temporary measure passed in 1847, which was continued from time to time and became permanent by a special enactment in 1860, and the liens on growing crops under the law of 1862. The mortgages on live stock are current till discharge, while the liens on wool mature at the end of each season and terminate without being formally discharged. Mortgages under each Act are valid without delivery of the stock or crops to the mortgagees. The figures relating to live stock are given in some detail, as they throw considerable light on the condition of the great pastoral industry of the country. They must, however, be taken with this qualification, that the amount stated represents in many cases merely nominal indebtedness, and the advances are not in every instance made to persons financially embarrassed. But with full allowance on this score, the figures given hereunder reveal the large degree of assistance required by the pastoralists. In the table where amounts are secured both by lien on the wool and by mortgage of the sheep, they are included under the head of mortgages only:—

Year.	Liens on Wool.			Mortgages on Live Stock.				
	Number.	No. of Sheep.	Consideration.	Number.	No. of Sheep.	No. of Horned Cattle.	No. of Horses.	Consideration.
			£					£
1903	1,399	3,045,995	509,899	2,030	2,303,295	64,417	13,143	845,979
1904	1,473	3,363,069	609,742	2,354	2,457,303	99,610	12,697	1,076,967
1905	1,618	3,704,577	643,953	2,465	2,604,613	80,020	15,627	1,188,076
1906	1,634	3,444,400	658,292	2,818	3,054,088	94,893	15,987	1,248,972
1907	1,751	3,931,620	834,747	3,176	3,401,888	139,091	13,481	1,723,708

## DISCHARGES OF MORTGAGES.

The number of discharges registered amounted last year to about one-third of the mortgages of live stock registered. The figures for the ten years ended 1907 were:—

Year.	Number.	Amount.	Year.	Number.	Amount.
		£			£
1898	423	821,644	1903	397	532,868
1899	432	957,082	1904	410	402,398
1900	521	687,787	1905	509	644,569
1901	438	960,453	1906	768	1,184,201
1902	337	751,455	1907	914	1,236,705

## LIENS ON GROWING CROPS.

Under the provisions of the Act, liens, the duration of which must not exceed one year, are made on agricultural and horticultural produce. Such advances do not ordinarily reach large sums, either individually or in their total, as there is an element of uncertainty in the security offered. During the last ten years the advances ranged from £96,363 to £181,234 per annum. The liens registered in 1907 were 917 in number, covering advances to the extent of £96,363:—

Year.	Number.	Consideration.	Year.	Number.	Consideration.
		£			£
1898	1,779	161,216	1903	1,607	181,234
1899	1,712	158,359	1904	1,406	159,620
1900	1,514	161,887	1905	1,520	172,368
1901	1,390	131,814	1906	1,264	142,567
1902	1,077	109,342	1907	917	96,363

## MORTGAGES ON SHIPS.

Mortgages of registered British vessels are dealt with under the Merchant Shipping Act of 1894. The mortgages are divided into two classes, one in which the ship is the sole security, and the other in which the advances are made on the security of what is termed in the Act "the account current," which may comprise ships, wharfage appliances, &c. Registrations are effected at the two ports of registry, Sydney and Newcastle; and the returns are given in the subjoined statement:—

Year.	Mortgage on ships only.				Mortgage on account current.			
	Sailing Vessels.		Steam Vessels.		Sailing Vessels.		Steam Vessels.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
		£		£		£		£
1903	11	3,768	20	48,571	1	1	5	6,251
1904	8	4,127	27	29,433	10	7,703	7	24,200
1905	5	1,975	7	33,581	23	78,317	11	90,351
1906	15	14,150	21	65,907	3	3	17	16,781
1907	3	990	11	18,240	2	2,001	9	20,008

## BILLS OF SALE.

All mortgages of personalty other than ships and shipping appliances, wool, live stock, and growing crops, are filed and entered at the Supreme Court under the Bills of Sale Act of 1855, as consolidated by Act No. 10 of 1898. This Act provides that each document shall be filed and entered within thirty days after it is made or given, otherwise the transaction is illegal; and that the registration shall be renewed every twelve months; and to prevent fraud and imposition the records are open to the inspection of the public. The total amount of advances annually made on bills of sale is not readily available, but judging from the number of bills filed the sum must be considerable. All classes of the community participate in the advantages of the Act, but brewers and money lenders figure conspicuously among the transferees. No complete record is made of the bills terminated voluntarily or by seizure, the official records showing only those discharged in the ordinary way. Seizures of the security given, which generally comprises household furniture and stock-in-trade, are common occurrences, and it is to be regretted that no record of them is kept; but, as previously shown, the neglect in the registration of foreclosures is a weakness in the procedure under all Acts regulating mortgage transactions. The bills filed and the discharges registered for the five years ended 1907 were as follow:—

Year.	Registrations.		Renewals under Bills of Sale Act of 1898.
	Filed in Supreme Court.	Satisfied or orders for discharge made.	
1903	3,614	179	2,238
1904	3,039	261	2,221
1905	2,728	224	2,187
1906	2,428	268	2,069
1907	2,238	304	1,894

## DISTRIBUTION OF PROPERTY.

In making estimates of the wealth of a country the probate value of estates has frequently been taken as the basis of the calculations. This, however, is hardly correct, as the probate returns give only the apparent property left by deceased persons, irrespective of debts. To assume that the average amount of property left by each adult who dies during a given period represents the average possessed by each living adult is open to two objections. First the average age of adults who die is greater than that of those still surviving, and secondly the wealth of an individual increases with years, and, generally speaking, is greatest at death. The valuations of estates for stamp duty purposes are, however, on a different plane. Such valuations are far below those exhibited in the probate returns, for while during the twelve years ending 31st December, 1907, the probate returns show a total of £77,324,184, the attested value of the estates on which stamp duty was paid was £60,442,648, or over 21 per cent. less. If it were possible to obtain the ages of persons dying, the stamp duty returns would possess considerable value in estimating the wealth of the community, but as matters stand it has not appeared practicable to utilise them. Some useful statistical comparisons may, however, be drawn from a consideration of the probate returns. A table is annexed showing the number of estates and amount entered for probate in each of the calendar years 1896 to 1907, the number of estates and amount

on which stamp duty was paid during the twelve financial years ended 30th June, 1907, being given in the last two columns:—

Year.	* Probate Court Returns.		† Stamp Duty Returns.	
	No. of Estates.	Amount.	No. of Estates.	Amount.
		£		£
1896	2,438	6,694,916	2,179	4,194,530
1897	2,210	5,925,042	2,071	4,366,500
1898	2,231	5,925,366	2,251	4,772,485
1899	2,505	5,063,552	2,328	5,025,650
1900	2,452	4,731,032	2,327	3,529,580
1901	2,657	7,033,450	2,410	4,628,547
1902	2,782	5,807,620	2,726	5,570,718
1903	2,767	7,179,882	2,740	5,385,467
1904	2,850	6,155,963	2,750	5,205,045
1905	2,804	7,714,416	2,712	5,297,532
1906	2,852	7,529,437	2,802	6,066,182
1907	3,084	7,563,499	2,797	6,400,392
Total ...	31,682	77,324,184	30,093	69,442,648

\* Year ended 31st December.

† Year ended 30th June.

As the table shows, the number of estates dealt with during the period reached 31,682, the total assessed value for probate being £77,324,184. According to these figures, the average value of estate left by each person who died possessed of property was £2,441. A much better guide, however, is furnished by the net value of estates on which stamp duty is paid. According to these figures, as shown in the above table, stamp duty was paid during the twelve years, 1st July, 1895, to 30th June, 1907, on 30,093 estates, valued at £60,442,648. This gives an average value per estate of £2,008.

The following information gleaned from returns collected by the Stamps Office in Sydney, in connection with assessment of estates of deceased persons, gives the residence of owners of the £60,442,648 on which stamp duty was paid during the last twelve years:—

	£	Proportion per cent.
New South Wales ... ..	49,226,723	81·5
Europe, including Great Britain ... ..	5,925,525	9·8
Victoria ... ..	3,710,655	6·1
Other Australian States and New Zealand ...	1,340,745	2·2
Elsewhere ... ..	239,000	0·4
Total ... ..	60,442,648	100·00

From the above distribution it would seem that 18·5 per cent. of the private property in New South Wales is possessed by dwellers outside its confines, Europe, including Great Britain, holding 9·8 per cent.; Victoria, 6·1 per cent.; other Commonwealth States and New Zealand, 2·2 per cent.; other countries, 0·4 per cent.

Some idea of the proportion of the whole population possessing estates of sufficient value to be the subject of specific bequest may be gained from a comparison of the number of persons leaving property at death, with the

total number of persons dying during a fixed period. In the following table such a comparison has been instituted for quinquennial periods since 1880, the figures showing the proportion of persons dying possessed of property per hundred of the total deaths in each quinquennium :—

Period.				Proportion of Estates per 100 deaths of total population.
				per cent.
1880-84	...	...	...	11.0
1885-89	...	...	...	11.6
1890-94	...	...	...	13.2
1895-99	...	...	...	14.9
1900-04	...	...	...	17.0
1905-07	...	...	...	18.9

Such a distribution of wealth as the above figures show betokens a widely diffused basis of prosperity.

A still more potent illustration of the wide distribution of property in New South Wales is afforded by the next table, which shows the proportion of estates per 100 deaths of adult males, as well as the proportion per 100 deaths of adult males and females. Some inquirers neglect the latter method of comparison, but since large numbers of females are possessors of valuable property the fact should certainly be taken into consideration in order to arrive at a just estimate of the distribution of private wealth. The figures are given for quinquennial periods, commencing with the year 1880 :—

Period.				Proportion of Estates per 100 deaths of adult Males.	Proportion of Estates per 100 deaths of adult Males and Females.
1880-84	...	...	...	34.6	22.3
1885-89	...	...	...	37.5	23.8
1890-94	...	...	...	41.2	25.8
1895-99	...	...	...	42.7	26.2
1900-04	...	...	...	46.0	27.8
1905-07	...	...	...	46.2	27.7

The same weakness, however, applies to these figures as is the case with those previously given in regard to the values, for inquiry shows that during the last eleven years three in every hundred estates, concerning which probate or letters of administration were granted, proved to be without assets, so that the proportions must be somewhat reduced.

It should be remembered that the statement that there is a wide distribution of property in New South Wales must be taken relatively. The number of adults in the State in 1907 is estimated at 806,700, so that on the basis of those who died, the property owners totalled about 217,500, the remaining 589,200 being without property. The following table is of interest as showing the distribution of property amongst the persons who died during the twelve years 1896-1907 :—

Category.	Number of Persons dying with Property.	Proportion of total adults in each category per 10,000.	Total Value of Estates of deceased.	Percentage of Property belonging to persons in each category.
	No.	No.	£	per cent.
£50,000 and over .....	155	52	20,602,656	34.08
£25,000 to £50,000 .....	188	62	6,533,870	10.81
£12,500 to £25,000 .....	402	134	6,889,641	11.40
£5,000 to £12,500 .....	1,003	333	7,820,795	12.94
£200 to £5,000 .....	18,721	6,221	17,709,360	29.31
Under £200 .....	9,624	3,193	886,326	1.46
Total .....	30,093	10,000	60,442,648	100.00

## LAND LEGISLATION AND SETTLEMENT.

From the early days of settlement until the year 1861 the Crown disposed of lands under prescribed conditions, by grants, and by sales, so that by the end of 1861 an area of 7,146,579 acres had been alienated, as shown in the statement below:—

	acres.
1. By grants and sales by private tender to close of 1831	3,906,327
2. " " in virtue of promises of early Governors made prior to 1831, from 1832-40 inclusive	171,071
3. " sales at auction, at 5s., 7s. 6d., and 10s. per acre, from 1832-38 inclusive	1,450,508
4. " " " " 12s. and over per acre, at Governor's discretion, from 1839-41 inclusive	371,447
5. " " " " 20s. per acre, from 1842-46 inclusive	20,250
6. " " " " and by purchases in virtue of pre-emptive rights, from 1847-61 inclusive	1,219,375
7. " grants for public purposes, and for grants in virtue of promise of Governor made prior to the year 1831, and grants in exchange for lands resumed from 1841-61 inclusive	7,601
Total alienated on 31st December, 1861	7,146,579

In dealing with the constitution of rural property, it is necessary to mention that certain grants were made under special enactments. Instructions issued to Sir Thomas Brisbane directed the Governor to reserve one-seventh of the Crown lands in each county for the purpose of Church and School establishments, but these instructions were not fully carried out, as the reservations did not amount to anything like the proportional area specified. The reserve comprised a total area of 443,486 acres, which subsequent surveys and computation of the area within the limits of the reservations show to be actually 454,050 acres. These lands were administered by the Clergy and School Land Corporation until the abolition of that body by order of Council of the 4th February, 1833, whereupon all lands reverted to the Crown, and an agent was appointed to determine the claims of purchasers, to whom deeds of grant were made, the lands being secured to them by a subsequent Act of Council dated the 5th August, 1834. Of the area mentioned above, 171,746 acres were alienated up to the year 1880, when, by the Church and School Lands Dedication Act of that year, the balance of 282,304 acres came under the control of the State legislature to be administered for the purpose of Public Instruction. The Church and School Lands Act of 1897, however, vested these lands in the Crown, free from all trusts and provisions affecting the same, but subject to the provisions of the Crown Lands Act of 1884 and any Acts amending the same, thus determining the land as Crown land. Until the areas are classified in accordance with the provisions of the Crown Lands Act of 1895, they can be dealt with only by reservation, dedication, license, or held under special or annual lease.

The Australian Agricultural Company was incorporated by an Act of the Imperial Parliament, dated the 21st June, 1824, and a promise of a grant of 1,000,000 acres made to this Company was fulfilled in the following year. Originally a grant containing 1,048,960 acres was selected

in the country surrounding Port Stephens, but in 1832 the Company was authorised to exchange a portion of this grant, containing 600,000 acres, for two areas situated on the Peel River and on the Liverpool Plains, respectively. These three grants are of the following extent:—

	acres.
Port Stephens Estate, County of Gloucester ... ..	464,640
Peel River Estate, County of Parry ... ..	249,600
Warrah Estate, Liverpool Plains, County of Buckland... ..	313,298
Total ... ..	1,027,538

In addition to this land, the Company obtained from the Crown the promise of a lease of the coal-fields at Port Hunter (Newcastle) for thirty-one years. This was, however, afterwards exchanged for a grant of 500 acres, an area which was increased in 1828 to 2,000 acres of coal land, upon which the Company's collieries are now situated.

#### OCCUPATION OF PASTORAL LANDS.

The pastoral lands of New South Wales have been occupied under various systems. Land was held for grazing in the early days by virtue of tickets of occupation, which ceased to be issued on the 1st May, 1827, after which date persons holding such lands were required to pay a quit-rent of 20s. per 100 acres per annum, and to vacate the land at six months' notice. The requirements of the settlers for depasturing their increasing stock induced them to occupy Crown lands without any right except that of first discovery, and as they extended their operations inland the Legislature found itself compelled, in 1833, to pass an Act protecting Crown lands from intrusion and trespass; and commissioners were appointed for the purpose of safeguarding the interests of the State.

The discovery of new country soon had the effect of taking many of the pioneer squatters beyond the limits of settlement as proclaimed on the 14th October, 1829, and without authority or license large tracts of unlocated Crown lands were occupied. Fresh regulations, in which severe penalties were enacted, were issued on the 29th July, 1836, with the view of restraining this unauthorised occupation. These regulations being in many cases disregarded, an Act was passed in 1839, to further restrain; and to provide the means for defraying the expense of police and commissioners a yearly assessment was levied upon stock at the following rates:— $\frac{1}{2}$ d. for every sheep;  $1\frac{1}{2}$ d. per head of cattle; and 3d. for every horse.

The Imperial Act of the 9th March, 1847, which rendered it lawful for the Sovereign, by any Order in Council, to make and establish such regulations as should seem meet for the sale and occupation of the waste lands, was immediately followed by an order introducing an entirely different system in legislation for the pastoral occupation of lands in New South Wales. Hitherto the tenure had been yearly, and the fee was paid on the extent of land occupied by the squatter. For this system was substituted fixity of tenure of lease, and the license fee was calculated upon the stock-carrying capacity of the run. Under the regulations issued in 1847, the term of the pastoral leases in the unsettled districts was fixed at fourteen years; in the intermediate division eight years; and in the settled districts the yearly tenure was retained. The licensing fee was charged at the rate of £10 for 4,000 sheep, or a proportional number of cattle—which was the minimum at which the stock-carrying capabilities of a run could be assessed—and £2 10s. for every additional 1,000 sheep, or proportionate number of cattle. In the settled districts lands were let for pastoral purposes only, in sections of not less than 1 square mile in area, the annual

rental for each section being fixed at 10s. The holders of alienated lands were permitted to depasture their stock upon Crown lands adjoining their holdings free of charge, this permission, however, constituting only a commonage right.

The Occupation Act of 1861 abolished the Orders in Council, and inaugurated a new system, limiting the tenure of pastoral leases to five years in the unsettled and intermediate or second-class settled districts, and leaving the whole of the pastoral leases open to the operations of the free selectors. The evils resulting from this system led Parliament to adopt in 1884, 1889, 1895, and finally in 1905 the measures at present in force, the provisions of which are described below.

#### ROBERTSON'S LANDS ACT.—SELECTION BEFORE SURVEY.

The conditions of colonisation altered greatly under the powerful attraction of the gold-fields, and, after the first excitement of the rush for gold had died out, the question of land settlement had to be discussed in an entirely new spirit, to meet the wants of a class of immigrants of a different type from those contemplated by former enactments, the result being the passing of the Crown Lands Act of 1861, by Sir John Robertson. Before this Act became law, the conditions of settlement rendered it difficult for men of small means to establish themselves with a fair chance of success. The new measures aimed at facilitating the settlement of an industrial agricultural population side by side with the pastoral tenants; and, with this in view, the Act introduced a principle entirely new to the land legislation of the State, namely, that of free selection, in limited areas, *before survey*. To this privilege was attached the condition of *bona fide* residence, and the land was to be sold at a fixed price, carrying interest on the balance outstanding, after deducting the amount of the deposit, at the rate of 5 per cent. per annum.

This provision, however, was modified by the Amending Act of 1875, under which annual instalments were payable, and the option was given to any conditional purchaser of lands taken up prior to this amendment to avail himself of the change in the method of payment. The system of unconditional sales was, however, continued under the Act of 1861; and during the twenty-three years the Act was in operation 23,470,140 acres were sold conditionally, and 15,572,001 acres by auction, improvement purchase, in virtue of pre-emptive right, or otherwise without conditions, the total area alienated being 39,042,141 acres. In a very large number of cases the land selected or purchased reverted to the State, so that the absolute area sold or in process of sale when the Act of 1884 came into force amounted to only 32,819,023 acres, besides 7,146,579 acres alienated prior to 1861.

#### THE CROWN LANDS ACTS OF 1884 AND 1889.

The Act of 1861 was, after many amendments, superseded by that of 1884, with the supplementary enactment of 1889. Though differing widely from the former Act in many important particulars, these measures maintained the principle of free selection before survey, but with one essential difference. Under the original Act the whole area of the Crown lands was thrown open to free selection, and the lands held under pastoral lease were not exempted from the operation of this law. While maintaining the principle of selection before survey, the aims of the Acts of 1884 and 1889 were to give fixity of tenure to the pastoral lessee and to obtain a larger rental from the public lands, at the same time restricting the area sold unconditionally.

For this last purpose the holder of a pastoral lease under the old Act was required to surrender one-half of his lease, which was resumed by the Crown for subsequent alienation, leasehold, or reserve; the other half remaining in the leasehold occupation of the pastoralist under fixity of tenure for a term of years. It was computed on the 31st December, 1884, when this division was made, that there were 4,313 leased runs, yielding an annual rental of £268,500, and forming about 1,600 "stations," estimated to contain the bulk of the unalienated public estate, after allowing for reserves, &c. That the increase in the revenue from pastoral occupation, which was one of the principal objects of the alterations introduced in the land legislation by the Act of 1884, has been realised, may be gathered from the fact that during the financial year 1907-8 the total revenue received from the pastoral occupation of Crown lands amounted to £593,413.

#### THE CROWN LANDS ACTS OF 1895 AND 1903.

Whatever may have been the merits of the Act of 1861, it conspicuously failed to encourage *bona fide* settlement; and the same must be said of the legislation of 1884 and 1889, since the accumulation of land in large estates continued, while settlement proceeded very slowly. Expert opinion strongly pointed to the necessity of introducing entirely new principles into the agrarian legislation, and this has been done in the Crown Lands Acts of 1895 and 1903, which not merely remedy the defects of previous legislation, but, while placing land within easy reach of all, appear to supply, by the introduction of new systems of tenure, viz., homestead selections and settlement leases, something that was needed to transform the land speculators into permanent settlers.

The State is divided into three territorial divisions, viz., the Eastern, the Central, and the Western; the boundary lines running about north and south. The control of the lands within the Western division is vested in the Western Lands Board, consisting of three commissioners. The divisions are subdivided into Land Districts, in each of which is stationed a Crown Land Agent, whose duty is to receive applications and furnish information regarding land. Groups of these districts are joined together and form Local Land Board Districts. The Land Board consists of a chairman and one or two ordinary members. An appeal to the Land Appeal Court may be made against the decision of the Board. This Court is composed of a President and two commissioners, whose decisions in matters of administration have the force of judgments of the Supreme Court; but whenever questions of law become involved, a case may be submitted to the Supreme Court, either at the written request of the parties interested, or by the Land Appeal Court. The conditions of alienation and pastoral occupation of Crown Lands differ in each of the three divisions of the State.

The Eastern Division has an area of 61,260,326 acres, and includes a broad belt of land comprised between the sea-coast and a line nearly parallel thereto. This line starts from a point midway between the small settlements at Bonshaw and Bengalla on the Dumaresq River, and terminates at Howlong, on the River Murray, and thus embraces the coastal districts of the State, as well as the northern and southern tablelands. In this division is to be found some of the best agricultural land in New South Wales, and here lie all the original centres of settlement, the markets of the State being readily accessible. For these reasons, the conditions for the purchase and occupation of the Crown lands in the Eastern Division are more restricted than is the case in the Central and Western Divisions.

The Central Division embraces an area of 57,055,846 acres, extending from north to south between the western limit of the Eastern Division and a line starting from a point on the Macintyre River, where it is crossed by the 149th meridian of east longitude, and following this river and the Darling to the junction of Marra Creek; thence along that creek to the Bogan River, and across to the River Lachlan, between the townships of Euabalong and Condobolin, along the Lachlan to Balranald, and thence to the junction of the Edward River with the Murray, on the frontier of Victoria. The Central Division thus embraces the upper basin of the Darling River in the northern part of the State, and portions of those of the Lachlan, the Murrumbidgee, and other affluents of the Murray in the south. The land in this division is mainly devoted to pastoral pursuits; but experience having proved that agriculture can be successfully carried on, the area cultivated has increased considerably.

The Western Division comprises the whole of the land situated between the western limit of the Central Division and the South Australian border. It embraces an area of 80,318,708 acres, watered by the Darling River and its tributaries. This part of New South Wales is essentially devoted to pastoral pursuits. Water conservation and irrigation may in time counteract climatic conditions and irregular rainfall, and make agriculture possible over this large area, as its soil is adapted to the growth of any kind of crop; but legislation in regard to the occupation of the lands of the district is based upon the assumption that for many years to come there will be little inducement for agricultural settlement.

Under the Acts at present in force, land may be acquired by the following methods:—(1) By conditional and additional conditional purchase with residence; (2) by conditional purchase without residence; (3) by classified conditional purchase; (4) by the preferent right of purchase attached to conditional leases; (5) by improvement purchases on gold-fields; (6) by auction sales; (7) by after-auction sales; (8) by special sales without competition; (9) by way of exchange; (10) by virtue of volunteer land orders; and (11) by homestead selection.

Crown lands may also be let under the following systems, viz.:—Annual lease, conditional purchase lease, conditional lease, lease as inferior lands, occupation license, pastoral lease, scrub lease, special lease, residential lease on gold and mineral fields, improvement lease, settlement lease, snow-lands lease, and working men's blocks.

The maximum area which can be conditionally purchased differs in the Eastern and Central Divisions. In the Western Division land can be occupied only under lease, or alienated by auction.

#### *Conditional Purchases.*

Any unreserved Crown lands, not held under pastoral or other lease, in the Eastern and Central Divisions are available for conditional purchase, and lands held under annual lease or occupation license may also be acquired in this way. Land under conditional lease in any division may be conditionally purchased, but only by the leaseholder. Lands within suburban boundaries or within population areas may be proclaimed as special areas, and are open to conditional purchase under the special conditions prescribed. The existence of improvements does not constitute a bar to conditional purchase, but the applicant is required to pay for them.

Any person over the age of 16 years, of either sex, other than a married woman who has not been judicially separated from and is living apart from her husband, may take up a residential conditional purchase; but no one under the age of 21 years can select a non-residential conditional purchase. Every conditional purchase must be made solely in the interest of the

applicant. Minors who become conditional purchasers have, in connection with their land, the rights and liberties of persons of full age.

The minimum and maximum areas allowed for each class of conditional purchase are as follows:—

Class.	Division.	Minimum Area.	Maximum Area.
		acres.	acres.
Residential ... ..	Eastern ... ..	40	640
Non-residential... ..	Central ... ..	40	2,560
Special area ... ..	Eastern ... ..	40	320
Special area ... ..	Central ... ..	40	320
Special area ... ..	Eastern ... ..	.....	640
Special area ... ..	Central ... ..	.....	640

With regard to special areas, both the minimum and maximum areas are subject to proclamation in the *Government Gazette*, and, are, therefore, liable to limitation. It is open to any conditional purchaser to take up the maximum area at once, or by a series of purchases at convenient intervals. With the exception of non-residential purchases, provision is made in the Crown Lands Amendment Act, 1908, that the maximum areas specified may be exceeded by means of additional holdings, the area of which, together with all other lands held, other than annual tenure, must not exceed a home maintenance area. The additional holdings need not necessarily adjoin the original holdings, but be situated within a reasonable working distance. Under the "Crown Lands Act Amendment Act of 1905," areas may be set apart for original holdings which include (a) original conditional purchases and (b) original conditional purchases and conditional leases to be taken up in virtue of and at the same time as the original conditional purchase within the area; or additional holdings which include (a) additional conditional purchases, (b) conditional leases other than those previously mentioned; but no area can be taken up under both classes of holdings. Prices, capital value, and rentals of the areas are to be specified in the notification.

Lands may be classified and set apart, by notification, at prices either above or below £1 per acre, where such a course is deemed desirable.

An application for a conditional purchase, or for an additional conditional purchase, must be lodged with the Crown Lands Agent of the district in which the land is situated, and a deposit and survey fee paid at the same time. The deposit on residential purchases is at the rate of five per cent. of the price of the land, and 4s. per acre on non-residential purchases of ordinary land; while on special areas, and on lands within classified areas, it varies according to the prices fixed for the land. Under ordinary conditions the balance of purchase money, with interest at 4 per cent. per annum, is cleared off by thirty annual payments of 1s. per acre. The first instalment is due after the expiration of three years from the date on which the contract was made. In the case, however, of holdings brought under the Conditional Purchasers' Relief Act of 1896, the instalments may be reduced to 9d. per acre, and in some instances to 6d. per acre, thus extending the total period of repayment to sixty-six years, provided the holders of the conditional purchases are and continue in residence. By the Crown Lands Act Amendment Act of 1903, the rate of interest on the balance of purchase money has been reduced to 2½ per cent. per annum for any conditional purchase made after the passing of that Act, and in certain cases, in respect of conditional purchases made before the passing of that Act.

The original conditional purchase must be occupied continuously by the selector for a period of ten years, and residence must be commenced within three months after the application has been confirmed by the Land Board, who may grant leave of absence for a period in special circumstances. Each additional conditional purchase or conditional lease is subject to the condition of residence indicated, but the place of residence, may be on any block of the series, and the term may be reduced by the applicants' previous residence on the series, up to, but not exceeding, five years.

The selector is required to enclose his land, within three years after confirmation, with such a fence as the Land Board may prescribe; but he may substitute improvements in lieu of fencing. In such a case, permanent improvements, of the value of 6s. per acre, but not exceeding £384, are required within three years, and these improvements must be brought up to the value of 10s. per acre, but not exceeding £640, within five years from the date of confirmation. In the case of non-residential purchases, the land must be fenced within one year after date of confirmation, and within five years other improvements to the value of £1 per acre must be effected. An original non-residential conditional purchase may, under the Crown Lands Amendment Act, 1908, be converted, with any non-residential conditional purchase made in virtue thereof, into an original conditional purchase, provided that the ten years residence commence from the date of application for such conversion. This term is subject to reduction, and all moneys previously paid are credited towards payment of the converted conditional purchase.

Any conditional purchases, or conditional leases of the same series, may be converted into a homestead selection, provided the holder has been in *bonâ fide* residence for at least six months, and in that case all moneys paid as interest or rent are taken as having been paid for the use of the land, and all moneys paid off the purchase money credited towards future rent of the selection.

#### *Auction Sales, and After-auction Purchases.*

Crown lands are submitted to auction sale under ordinary or under the deferred payment system. Under the ordinary system the balance of purchase money is payable, without interest, within three months of the day of sale, while, under the deferred payment system, the balance is payable by instalments, with 5 per cent. interest, distributed over a period not exceeding five years. In either case, 25 per cent. of the purchase money must be deposited at the time of sale. Auction sales, to the extent of not more than 200,000 acres in any one year, are permitted. Town lands cannot be sold in blocks exceeding half an acre, nor at a lower upset price than £8 per acre and suburban lands must not exceed 20 acres in one block, the minimum upset price being £2 10s. per acre. Country lands may be submitted in areas not exceeding 640 acres, at an upset price of not less than 15s. per acre. The value of improvements on the land may be added to the upset price.

#### *Improvement Purchases.*

The holder of a miner's right or a business license on a goldfield in authorised occupation of land containing improvements, may purchase such land without competition. These improvements must include a residence or place of business, and be of the value of £8 per acre on town land, and £2 10s. on any other land.

*Special Purchases.*

Any unnecessary road which bounds or intersects freehold land, may be closed and sold to the freeholder at a price determined by the Land Board, and any unnecessary road which passes through land held under conditional purchase may be closed and added to the area.

Many Crown grants of land having water frontage contain a reservation, usually 100 feet from high-water mark, but the Crown may rescind the reservation, and convey the land to the holder of the adjoining land, at a price to be determined by the Land Board.

The owner in fee simple of land having frontage to the sea, or to any tidal water or lake, who desires to reclaim and purchase any adjoining land lying below high-water mark, may apply to the Department of Lands to do so, except in the case of Port Jackson, the control of which is vested in the Sydney Harbour Trust Commissioners. No reclamation is authorised which might interrupt or interfere with navigation.

Land encroached upon by buildings erected on granted land, or land situated between granted land and a street or road, which forms, or should form, the way of approach to the granted land, or land to which no way of access is attainable, or land which is insufficient in area for conditional purchase, may be purchased by the owner in fee simple of the adjoining land, at a price determined by the Board.

*Volunteer Land Orders.*

Holders of certificates issued to volunteers who have served under the provisions of the Volunteer Force Regulation Act of 1867, are entitled to a free grant of 50 acres of land. These certificates entitle the holder to 50 acres of such land as may be open to conditional purchase, other than lands within a proclaimed special area. Claims to these grants may not be considered unless lodged within three years after the commencement of the Crown Lands (Amendment) Act, 1908.

*Exchanges of Land.*

Before the granting of fixity of tenure in connection with pastoral leases, the lessees had made it a practice to secure portions of their runs by conditional purchases and purchases in fee simple. The practice was, in many instances, disadvantageous to the public estate, as Crown lands were left in detached blocks, severed by lessees' freehold properties, and the lessees have realised that it would be convenient to them to gather their freeholds together in one or more consolidated blocks. This may be secured by the Crown accepting a surrender of private lands, and granting lands in exchange elsewhere.

*Homestead Selection.*

The appropriation of areas for homestead selection is a prominent feature of the Act of 1905, and the lands chosen for subdivision are good agricultural lands. Where suitable lands are situated within easy access of towns, small blocks are set apart to suit the requirements of business people. The land becomes available after particulars relating to area, capital value, &c., are published in the *Gazette*. The maximum area that may be selected is 1,280 acres; but the selector is limited to a block as gazetted. The tenure is freehold, subject to perpetual residence and perpetual rent. The selector is required to deposit one-half years' rent and one-tenth of the survey fee with his application, and to pay for any improvements already on the land. The rent, until the expiration of the first six years of the selection, if

the grant is not previously issued, is  $1\frac{1}{4}$  per cent. of the capital value of the block. An appraisalment of the gazetted capital value of the land may be obtained under certain conditions. An additional holding may be acquired to make up an area which, with all other lands held by the applicant other than under annual tenure, would not be more than sufficient for the maintenance of the applicant's home in average seasons and circumstances. The additional holding need not necessarily adjoin the original holding, but must be situated within a reasonable working distance thereof. Any person who is eligible to take up a conditional purchase may apply for a homestead selection. After the issue of the grant the rent is  $2\frac{1}{2}$  per cent. on the improved capital value of the land, which is appraised every ten years. The only expenditure required in improvements is £20 for a dwelling-house within the first eighteen months. The condition of residence is a perpetual obligation, but after issue of the grant, may be restricted to seven months in each year. The land may not be transferred during the first five years, and each successive transferee is required to live on the land while he holds it. Tenant right in improvements is secured, and the holding may be so protected that it cannot, by any legal procedure, except levy or sale for taxes, be wrested from the owner while he lives thereon. Under the Crown Lands (Amendment) Act, 1908, a homestead selection or grant may be converted into a conditional purchase lease, or a conditional purchase, or a conditional purchase and conditional lease, but so that the area comprised in such lease does not exceed three times the area in the conditional purchase. Holders of conditional purchases may convert their holdings into homestead selections.

#### *Working Men's Blocks.*

This tenure has been created by the Blockholders Act of 1901, under which workmen may secure a lease of a block, not exceeding 10 acres, for a period of ninety-nine years. An applicant must be not less than 18 years of age, and gain his livelihood by his own labour, and the rent is not more than 5 per cent. on the capital value of the land. The lessee and his family must reside on the land for at least nine months in every year, pay the rent annually and all rates, taxes, and value of improvements, and must fence the lease within two years. A blockholder may have his block protected from seizure for debt, except for rates and taxes.

#### *Conditional Purchase Leases.*

Areas set apart for disposal by way of conditional purchase lease are subdivided into such areas as the Minister for Lands may determine. The lease is for forty years, at a rental of  $2\frac{1}{2}$  per cent. per annum on the capital value. The value of existing improvements is appraised by the Land Board, and special conditions may be imposed regarding improvements, cultivation, preservation or planting of timber, etc.

Any male of the age of 18 years, and any female aged 21, who is not disqualified under the provisions of the Land Act, may apply for a conditional purchase lease. A female applicant must be unmarried or widowed or living apart from her husband under a decree of judicial separation.

Residence on the lease must be continuous for ten years, and must commence within twelve months from the date of confirmation, but the commencement of residence may be postponed to any date within five years of confirmation. At any time after the confirmation of an application, the holder may convert the area into a conditional purchase by payment of a deposit of 5 per cent. on the capital value of the land, provided that the

proper conditions have been observed, subject to all the unperformed conditions of the lease, except payment of rent. The balance of purchase money is payable by equal annual instalments at the rate of 5 per cent. of the price, consisting of principal and interest at the rate of  $2\frac{1}{2}$  per cent. on the unpaid balance, the first instalment being due twelve months after the date of application for conversion. Under the Crown Lands Act, 1908, land may be set apart for disposal as special conditional purchase lease, provided that for six months the land has been available for some class of residential holding. The areas must not be less than 20 nor more than 320 acres. No conditions of residence apply, but the substantial improvements of not less value than 10s. per acre must be completed within three years. Provision is also made that any holder of a conditional purchase lease may acquire additional conditional purchase leases, but in no case shall the total area of the lands held by him under any tenure, except annual, exceed a home maintenance area.

#### *Conditional Leases.*

A conditional lease may be obtained by any holder of a conditional purchase, other than a non-residential one, or a conditional purchase within a special area in the Eastern Division. Lands available for conditional purchase are also available for conditional lease, with the exception of lands in the Western Division, or within a special area or a reserve. Applications must be accompanied by a provisional rent of 2d. an acre and a survey fee. The area which an applicant may apply for as conditional purchases and conditional leases is restricted to 1,280 acres in the Eastern Division and 2,560 acres in the Central Division; but the Land Board may allow these areas to be exceeded. The lease is for a period of forty years, at a rent determined by the Land Board, payable yearly in advance. The conditions of fencing, or substitution of improvements in lieu of fencing, which attach to a residential conditional purchase, apply equally to a conditional lease, and residence is required as in the case of an additional conditional purchase.

#### *Settlement Leases.*

Under this form of tenancy, farms gazetted as available for settlement lease are obtainable on application, accompanied by a deposit consisting of six months' rent and the full amount of survey fee. The maximum area of agricultural land which may be taken up is 1,280 acres; but where the settler must combine agriculture with grazing, the farms may comprise any area not exceeding 10,240 acres. These areas may, however, be exceeded by means of additional holdings, and the additional holding need not necessarily adjoin the original holding, but must be situated within a reasonable working distance thereof. The lease is issued for a term of forty years, divided into four periods. The annual rent of the first period is that notified before the land is made available for lease; but the lessee may require the rent to be determined by the Board, and the annual rent for each succeeding period may be separately determined in like manner. Residence is compulsory throughout the whole term, and the land must be fenced within the first five years, and noxious weeds and animals on the land destroyed within eleven years. The lessee may apply at any time after the first five years of the lease for an area not exceeding 1,280 acres, on which his house is situated, as a homestead grant. The holder of a settlement lease may, under the Crown Lands Act, 1908, convert such lease into a conditional purchase, or into a conditional purchase and conditional lease under certain provisions, but in no case may the unimproved value of the land to be converted exceed £3,000.

*Improvement Leases.*

Improvement leases may comprise any scrub or inferior land not suitable for settlement in the Eastern or Central Divisions, and be obtained only by auction or tender. The rent is payable annually, and the lease, which may contain any necessary conditions, is for a period of twenty-eight years, with an area not exceeding 20,480 acres. Upon the expiration of the lease the last holder will have tenant-right in improvements. During the last year of the lease the lessee may apply for a homestead grant of 640 acres, on which his dwelling-house is erected. Should the Advisory Board, constituted under the Closer Settlement Act, 1907, report that land comprised in an improvement lease or scrub lease is suitable for closer settlement, the Minister may cause the surrender of the lease to the Crown and the owner will be compensated.

*Leases of Scrub and Inferior Lands.*

Scrub leases may be granted on application or disposed of by auction or tender, but inferior-lands leases may be acquired by auction or tender only. There is no limitation as to area, and in the case of a lease obtained by application the rent is appraised by the Local Land Board. The initial rent of an inferior-lands lease applies throughout the whole term; but the terms of a scrub lease may be divided into periods, and the rent for each period determined by reappraisalment. The term of each class of lease cannot exceed twenty-eight years. Leases of inferior lands are subject to conditions. The holder of a scrub lease must take such steps as the Land Board may direct for the purpose of destroying such scrub, and when destroyed to keep the land free from the same. During the last year of any of the leases application may be made for a homestead grant of 640 acres.

*Pastoral Leases.*

Provision is made in the Crown Lands Act Amendment Act of 1903, whereby the registered holder of any pastoral lease, preferential occupation license or occupation license may apply for a lease for not more than twenty-eight years of an area not exceeding one-third of the total area of the land comprised within the lease or license, subject to such rent, conditions of improvement, and withdrawal for settlement as may be determined.

*Occupation Licenses.*

There are two forms of occupation licenses, viz., preferential occupation licenses, comprising the area within the expired pastoral leases, and ordinary occupation licenses, comprising the parts of the holdings formerly known as resumed areas. Occupation licenses extend from January to December, but may be renewed annually at a rent determined by the Land Board.

*Annual Leases.*

Unoccupied land not reserved from lease may be obtained for pastoral purposes as annual leases on application, or they may be offered by auction or tender. No conditions of residence or improvement are attached to annual leases, and no security of tenure is guaranteed, and the land may be alienated by conditional purchase, auction sale, &c. The area is restricted to 1,920 acres in any one lease.

*Special Leases.*

Special leases are issued chiefly to meet cases where land is required for some industrial or business purpose, and may be obtained by auction or otherwise, and the term of the lease may not exceed twenty-eight years. The conditions attached are suitable to the circumstances of each case, and these, together with the rent, are determined by the Land Board. The Crown Lands Act, 1908, provides under certain conditions for the conversion of special leases and of church and school lands leases into conditional purchase leases or additional conditional purchase leases; or conditional purchases or additional conditional purchases; or homestead selections or additional homestead selections; or settlement leases or additional settlement leases; or conditional leases.

*Residential Leases.*

The holder of a "miner's right" or "mineral license" within a gold or mineral field may be granted a residential lease. A provisional rent of 1s. an acre is charged; the maximum area is 20 acres, and the longest term of the lease twenty-eight years. The annual rent is appraised by the Land Board. The principal conditions of the lease are residence during its currency and the erection within twelve months of necessary buildings and fences. Tenant-right in improvements is conferred upon the lessee. The holder of any residential lease may, under the Crown Lands Act, 1908, apply after the first five years of his lease to purchase the land held thereunder.

*Snow Leases.*

Any vacant Crown lands which for a portion of each year are usually covered with snow, and unfit for continuous use or occupation, may be leased as snow leases. Not more than two snow leases may be held by, or in the interest of, one person. The minimum area is 1,280 acres, and the maximum 10,240 acres. The term of the lease is seven years, but may be extended for three years.

## WESTERN DIVISION.

The administration of the Western Division under the "Western Lands Act of 1901" is vested in a Board of three Commissioners, entitled "The Western Land Board of New South Wales." The Commissioners, sitting in open Court, exercise all the powers conferred upon Local Land Boards by the Crown Lands Acts.

Subject to existing rights and the extension of tenure granted under certain conditions all forms of alienation, other than by auction and leases, prescribed by the Crown Lands Acts, ceased to operate within the Western Land Division from the 1st January, 1902.

Before any Crown lands become available for lease, the Commissioners must recommend the areas and boundaries and the rent to be charged, and, should there be any improvements on the land, determine the amount to be paid. When such lands are declared open for lease, applications must be made to the Commissioners, who may recommend the applicant they consider most entitled to it.

The registered holder of a pastoral, homestead, improvement, scrub, or inferior lease or occupation license of land in the Western Division, could apply before the 30th June, 1902, to bring his lease or license under the provisions of the "Western Lands Act of 1901." In cases where no application has been made, such lease or license is treated as if the Act had not been passed, and the Commissioners deal with such cases.

All leases issued or brought under the provisions of the "Western Lands Act of 1901" expire on the 30th June, 1943, except in cases where a withdrawal is made for the purpose of sale by auction or to provide small holdings, when, as compensation, the lease may be extended for a term not exceeding six years.

The rent on all leases current after the commencement of the Act is determined by the Commissioners for the unexpired portion. No rent or license fee may be less than 2s. 6d. per square mile or part thereof, and in no case may the rent or license fee be fixed at a higher rate than 7d. per sheep on the carrying capacity determined by the Commissioners.

#### LABOUR SETTLEMENTS.

Under the Labour Settlements Act, land may be made available for lease for the purpose of labour settlements. A settlement is placed under the control of a Board, which enrolls such persons as it may think fit; makes regulations concerning the work to be done; apportions the work among the members; and equitably distributes wages, profits, and emoluments after providing for the cost of the maintenance of the members. Any trade or industry may be established by the Board, and the profits apportioned among the enrolled members. The land is leased to the Board, in trust for the members of the settlement, for a period of twenty-eight years, with right of renewal for a like term.

When a Board has enrolled such a number of persons as the Minister for Lands may approve, it may apply for monetary assistance on behalf of the members of the settlement. The Minister has power to grant an amount not exceeding £25 for each enrolled member who is the head of a family dependent upon him; £20 for each married person without a family; and £15 for each unmarried person. On the expiration of four years from the commencement of the lease, and at the end of each year following, 8 per cent. of the total sum paid to the Board becomes a charge on its revenues, until the total amount advanced, with interest at the rate of 4 per cent. per annum, has been repaid.

On the 30th June, 1908, the only settlements in existence were those at Bega and Wilberforce. At Bega an area of 1,360 acres was attached to the settlement, and on the date specified there were 25 men enrolled, and a total population of 162. A sum of £2,421 has been advanced by the Government as a loan, and the value of improvements, exclusive of crops, is £2,296. At Wilberforce, an area of 409 acres has been granted for settlement. On the 30th June, 1908, there were eleven men enrolled, the total population being 53. The loans from the Government amounted to £2,495, and the value of improvements, exclusive of crops, is £2,360.

#### CLOSER SETTLEMENT.

Under the "Closer Settlement Act, 1901," provision was made for the acquisition of private lands or lands leased from the Crown for the purposes of closer settlement. Lands so acquired were to be divided into farms and leased for a term of ninety-nine years, at an annual rental of not more than 5 per cent. of the capital value of the land. No power of compulsory resumption was conferred by this Act, and consequently it was practically inoperative.

Under the "Closer Settlement Act, 1904," which repealed the 1901 enactment, provision was made for compulsory resumption of private land intended to be set apart for closer settlement where the value

exceeded £20,000, exclusive of improvements. The owners of private lands may also offer to surrender the same in consideration of a price to be specifically set out, and such offer is binding on the part of the owner for a period of nine months.

The Closer Settlement Amendment Act, 1907, constituted three Advisory Boards. These Boards report whether any land of not less value than £10,000, exclusive of improvements, is suitable to be acquired for closer settlement, and furnish such particulars as the Minister requires. The Governor may purchase the land by agreement with the owner, or where the value of the land, without improvements, exceeds £20,000, it may be resumed. Within six months after the passing of an Act sanctioning the construction of a line of railway, the Governor may purchase or resume for purposes of closer settlement land being the property of one owner and exceeding £10,000 in value, on either side of the proposed railway.

Before the land acquired is rendered available for settlement, a plan of the designed subdivision, showing areas and values per acre of the proposed settlement purchases, must be approved by the Minister. The design plan includes not only land acquired under the Act but also any adjacent Crown lands set apart for the purpose. Settlement areas are notified for disposal in three classes, viz., agricultural lands, grazing lands, and township settlement allotments.

Any male of the age of 18 years and upwards, and any female over 21 years, who is not the holder of any land exceeding 40 acres, or land held under lease, as provided in the Closer Settlement Act, or a township allotment thereunder, or land held as a tenant from a private holder, may apply for land under the Act; but if any person holding more than 40 acres divests himself of the land for the purpose of applying for a settlement purchase, his application will be disallowed. The person applying if a female, must be unmarried or widowed, or, if married, living apart from her husband under an order of judicial separation. Applications are lodged with the Crown Lands Agent, accompanied by a deposit of 5 per cent. of the notified capital value of the settlement purchase sought to be acquired. Residence for a period of ten years is required under every settlement purchase, and commences at any time within twelve months after the decision of the Land Board allowing the purchase; but the term may be extended to any date within five years of the allowance of purchase, on such terms and conditions as to improvement and cultivation as may be agreed upon between the applicant and the Land Board. Residence is held to mean continuous and *bona-fide* living, as the purchaser's usual home, upon the area allotted. Subject to the approval of the Land Board, the residence condition may be performed in any adjacent improvements on the land are held to fulfil this condition. Every purchaser town or village; and, on due cause being shown, may be suspended, either conditionally or otherwise. Where the land is unimproved, the purchaser is required to effect substantial and permanent improvements to the value of 10 per cent. of the capital value within two years from the date of application, and an additional 5 per cent. within five years, and a further additional 10 per cent. within ten years from the same date. Existing improvements on the land are held to fulfil this condition. Every purchaser is subject to conditions as to mining, cultivation, destruction of vermin and noxious weeds, etc. The purchase money is paid in thirty-eight annual instalments at the rate of 5 per cent. of the capital value of the land, with interest at the rate of 4 per cent.

The land may be leased under the Act in areas not exceeding 320 acres. Leases so granted are subject to the following conditions:—Improvements are not to be effected without the written consent of the Minister or Chairman of the Land Board; leases expire on the 31st December, but may be renewed on payment of yearly rent in advance not later than 10th December; the rent is to be appraised by Land Board, and the granting of a lease does not exempt the land from settlement purchase; the Minister may at any time cancel the lease after three months' notice.

The three Advisory Boards constituted under the Closer Settlement Act have inspected and reported upon many estates well suited for closer settlement, but no estates were acquired during the year 1908. Up to the 30th June, 1908, proclamations of intended acquisition of eleven estates were gazetted, covering an area of 354,025 acres. The following table contains information regarding areas at present administered under the Act.

	Myall Creek.	Gobba- gombalin.	Marrar.	Total.
	acres.	acres.	acres.	acres.
Acquired land...	53,929	61,866	26,608	142,403
Adjoining Crown land	20,578	4,344	797	25,719
Total	74,507	66,210	27,405	168,122
Capital Value—	£	£	£	£
Acquired land	137,667	225,561	75,134	438,362
Crown land	24,603	10,549	2,040	37,192
Total	162,270	236,110	77,174	475,554
Farms allotted to 30th June, 1908—				
Number	139	141	46	326
Area in acres	66,581	64,020	27,048	157,649

The Government township of Delungra, situated on the railway line and within the Myall Creek settlement area, has become an important business and residential centre.

#### PROGRESS OF ALIENATION.

The figures regarding land alienation under the legislation of 1861 and its subsequent amendments show that up to the 30th June, 1908, there were 14,879,236 acres sold by auction and other forms of sale.

As regards conditional sales, the following were applied for under the various Acts:—

	Selections applied for.	
	No.	Acres.
Under the Crown Lands Act of 1861—		
To May 24, 1880	136,389	14,982,120
Under the Crown Lands Act of 1880	55,084	8,488,020
Total to December 31, 1884	191,473	23,470,140
Under the Crown Lands Acts of 1884, 1889, 1895, and amending Acts	84,634	15,175,943
Grand total to 30th June, 1908	276,107	38,646,083

The number of selections cancelled, forfeited, lapsed, declared void, and converted into homestead selections, together with the balance of such voidances, etc., and that of increased over decreased areas, amounted to

83,248 conditional purchases, covering 12,118,048 acres, thus reducing to 192,859 lots and 26,528,035 acres, the number and area of selections which remained in existence at the 30th June, 1908. Deeds have now been issued upon 90,961 completed purchases, covering 11,659,869 acres; so that the number of purchases still standing good, but upon which the conditions have not been fulfilled, is 101,898, covering an area of 14,868,166 acres.

Under the Crown Lands Act of 1895, 8,346 applications for homestead selections were received to the 30th June, 1908, the aggregate area applied for being 3,365,055 acres. Of the applications lodged, 6,458, amounting to 2,400,623 acres, were confirmed. Homestead grants to the number of 3,482 comprising an area of 1,385,415 acres, were issued to the 30th June, 1908. The area held under homestead selection on the 30th June, 1908, exclusive of homestead grants issued was 771,561 acres.

The Volunteer Force Regulation Act of 1867 provided that in consideration of efficient service for a continuous period of five years from the 1st January, 1868, every volunteer was entitled to a free grant of 50 acres of land which may be open to conditional sale.

During 1908 these grants accounted for 150 acres, and up to the 30th June of that year the total area alienated by volunteer land orders amounted to 169,614 acres. Only a few orders are now outstanding, and these will doubtless be soon used, as no person has a right to a free grant of land in virtue of a volunteer land order unless application be made within three years from the commencement of the Crown Lands Act, 1908.

From 1862 to the 30th June, 1908, the Crown has dedicated 226,308 acres for public and religious purposes. During 1908 there were 1,425 acres so alienated.

The operations of the various Orders, Regulations, and Acts of Council and of Parliament for the disposal of the public lands, since the foundation of the State, have given the following results:—

Area granted and sold by private tender and public auction at prices ranging from 5s. to 20s. per acre, prior to the year 1862	Acres.
...	7,146,579
Area sold by auction and other forms of sale, 1862 to 30th June, 1908, inclusive	14,879,236
Area sold under system of conditional purchase for which deeds issued, 1862 to 30th June, 1908, inclusive	11,659,869
Area granted under Volunteer Land Regulations of 1867 to 30th June, 1908	169,614
Area dedicated for public and religious purposes, less resumptions, 1862 to 30th June, 1908	226,308
Homestead grants issued to 30th June, 1908	1,385,415
<b>Total area alienated to 30th June, 1908</b>	<b>35,467,021</b>
Area in process of alienation under system of conditional purchase standing good on 30th June, 1908	14,868,166
Area in process of alienation under system of homestead selection, including conditional purchases and conditional leases converted, exclusive of grants issued	771,561
<b>Total alienated and in process of alienation on 30th June, 1908</b>	<b>51,106,748</b>

It has been found impracticable to separate the area alienated by grant from that sold by private tender, as the records of early years are incomplete upon this point.

The following statement shows the amount paid for lands purchased from the State from the year 1821 to the end of June, 1908:—

Period.	Amount received.
	£
1821-1861 ... ..	3,785,002
1862-1871 ... ..	2,359,548
1872-1881 ... ..	17,015,358
1882-1891 ... ..	13,917,457
1892-1901* ... ..	11,995,452
*1902-1906* ... ..	4,027,877
*1907-1908* ... ..	2,028,991
Total received... ..	55,129,685
Less refunds ... ..	1,625,794
Net amount received ... .. £	53,503,891

\* To 30th June.

This sum includes £31,570,671 paid on account of conditional purchases. The amount outstanding on conditional purchases at the 31st December, 1907, was £7,842,740, making a total amount paid and owing on all lands sold £61,346,631.

The area leased to pastoral tenants and others at the end of June, 1908, comprised 129,123,140 acres (including leases to miners under the Mining Act), and was subdivided as follows:—

	Acres.
Pastoral Leases ... ..	1,258,955
Leases to outgoing Pastoral Lessees ... ..	1,133,082
Occupation Licenses ... ..	12,535,236
Conditional Leases... ..	16,338,676
Conditional Purchase Leases ... ..	328,448
Homestead Leases ... ..	931,910
Annual Leases ... ..	6,666,862
Settlement Leases ... ..	5,942,867
Improvement Leases ... ..	6,550,713
Scrub Leases ... ..	2,127,279
Snow Land Leases... ..	70,330
Special Leases ... ..	354,866
Inferior Land Leases ... ..	128,729
Artesian Well Leases ... ..	225,276
Other Leases ... ..	1,110,733
Western Lands Leases ... ..	73,227,685
Leases under the Mining Act ... ..	191,493
Total ... ..	129,123,140

The total available area of the State is 198,634,880 acres, and deducting the area sold and otherwise alienated, 51,106,748 acres, and the area leased, 129,123,140 acres, making a total of 180,229,888 acres, there remained a balance of 18,404,992 acres, representing the area of country neither alienated nor leased, including roads, unoccupied reserves, land unsuitable for settlement, and water.

#### AREA AVAILABLE FOR SETTLEMENT.

In 1895 attention was directed to the question of land legislation, as it was rightly contended that the Lands Acts of 1884 and 1889 had failed to prevent the accumulation of enormous landed estates in the hands of a very limited number of proprietors, backed up by the great

financial institutions of the country. Although it may be said in defence of the policy pursued by this class of landowners, that in many cases it was forced upon them by the defective nature of legislation which failed to discriminate between the very different interests of the pastoralists and the agricultural settlers, it must nevertheless have been patent to everybody that the rate at which these immense alienations of the public estate were being carried on threatened in a very short period of time to place formidable obstacles in the path of healthy settlement. The Acts mentioned have now, however, been superseded by the Crown Lands Act of 1895, which came into operation on the 1st June of that year.

As has already been shown, many radical changes in land legislation have been effected by this Act; but it must be borne in mind that immediate remedial action can be taken only in connection with that portion of the Crown lands which has not yet been alienated or leased to Crown tenants for a definite period of years. Leases granted under certain conditions, such as those attached to conditional leases, which carry with them the right of purchase at any time during their currency, may be considered to be in effect a form of alienation, as but a comparatively small portion of these areas is ever likely to return to the public estate. Lands under homestead leases in the Western Division not brought under the Western Lands Act, scrub lands, snow-covered areas, inferior lands, settlement lease, improvement lease, leases to outgoing pastoral lessees, leases for long periods of fixed tenure, as well as leases under the Western Lands Act for long terms, form another category of lands upon which past legislation lays a prescriptive claim.

The area which can be beneficially affected by the Act of 1895 is, therefore, limited to the area which is unalienated, or for which contracts have not been made, further reduced by the excision of reserves for public purposes, for gold-fields and other forms of mining enterprise, and for railway and other purposes. At the end of June, 1908, there were 35,467,021 acres absolutely alienated, for which deeds had issued; 14,868,166 acres conditionally sold, the conditions of purchase not being complete; 771,561 acres alienated and in process of alienation under the system of homestead selection, subject to the payment of rent in perpetuity; and 16,667,124 acres leased with the right to purchase; in all, 67,773,872 acres which have been placed entirely beyond the scope of present or future legislation.

Permission may now be obtained under the Crown Lands (Amendment) Act, 1908, for the conversion, under certain provisions, of settlement leases, special leases, and of church and school lands leases into conditional purchases, also for the purchase of residential leases.

The areas under long contracts of lease, in some cases with right of renewal, which no legislation can effect until the expiration of the fixed period of the tenure, are given below:—

	Acres.
Pastoral Leases, Western Division ... ..	1,258,955
Leases to Outgoing Pastoral Lessees ... ..	1,133,082
Homestead Leases ... ..	931,910
Scrub Leases ... ..	2,127,279
Artesian Well Leases ... ..	225,276
Snow-land Leases ... ..	70,330
Leases of inferior lands... ..	128,729
Settlement Leases ... ..	5,942,867
Improvement Leases ... ..	6,550,713
Leases under Western Lands Act ... ..	60,462,561
Other Leases ... ..	664,582
<b>Total</b> ... ..	<b>79,496,284</b>

The entire area affected by contracts existing at the end of June, 1908, amounted, therefore, to 147,270,156 acres, and these figures show how greatly the extent of territory has diminished to which remedial legislation is applicable. Of the balance, amounting to 51,364,724 acres, a large portion comprises reserves of various kinds; and if allowance be made for mountainous and other sterile lands, it will probably be found that the area suitable for occupation which the State has to offer to intending settlers is about 44,000,000 acres.

The progress of alienation and of conditional settlement by purchase and lease at various periods from 1861 to 1901, and annually since the last-mentioned year, is shown in the following table:—

At end of year.	Area Alienated for which deeds have issued.	Area Conditionally Purchased, standing good on 31st December.	Area Conditionally Leased on 31st December.	Area under Homestead Selection, exclusive of Homestead Grants.	Area under Homestead Grant.
	acres.	acres.	acres.	acres.	acres.
1861	7,146,579	.....	.....	.....	.....
1871	8,630,604	2,280,000	.....	.....	.....
1881	22,406,746	12,886,879	.....	.....	.....
1891	23,775,410	19,793,321	11,234,131	.....	.....
1901	26,408,169	20,044,703	13,980,942	1,491,073	35,385
1902	27,464,199	19,369,027	14,339,481	1,479,751	194,702
1903	28,292,915	18,823,660	14,750,348	1,262,774	472,175
1904	29,968,317	18,100,517	14,252,412	1,195,970	662,833
1905*	30,721,430	17,672,150	14,064,451	1,125,271	808,672
1906†	32,486,086	16,499,823	15,807,249	984,426	1,087,065
1907†	33,921,508	15,691,906	15,383,502	873,319	1,247,919
1908†	35,467,021	14,863,166	16,667,124	771,561	1,385,415

\* Half-year ended 30th June.

† Year ended 30th June.

As already pointed out, the land held under conditional lease is virtually alienated, since the holder has the right of converting his lease into a freehold at any time during its currency.

#### EFFECTS OF LAND LEGISLATION.

When the agitation which culminated in the framing of the Crown Lands Act of 1861 was in progress, it was contended that the Orders-in-Council then in force favoured the occupation of the country lands by the wealthier classes, and the principles of free selection before survey and of deferred payments were introduced in the new legislation, with the object of facilitating the settlement of an agricultural population side by side with the great pastoral tenants of the Crown. The statistical records for the year 1861 show that at the close of that year, and just before the new legislation had come into force, there were already 21,175 holders of rural lands, of whom 17,654 were located in the old settled districts, comprising twenty counties, grouped around three principal centres—the metropolis and the county of Cumberland, the Hunter River Valley, and that portion of the central tableland of which Goulburn, Bathurst, and Mudgee were the first towns; while the remaining 3,521 settlers were scattered over the pastoral districts. The figures showing the area held by these settlers do not discriminate between the land alienated and that occupied under lease from the Crown; but they show that in the old settled districts there were some 254,347 acres under cultivation—or an average of 14 acres per holding—and 8,522,420 acres used for stock; whilst in the pastoral districts 43,228 acres were cultivated, and 54,716,463 acres were occupied for grazing; so that, at that time, 63,536,458 acres, representing about one-third of the territory of the State, were already in the occupation of the settlers.

In addition to the clauses inserted in the Act of 1861 in the interests of those with small means, certain provisions were retained which secured the interests accrued to the pastoralists under former legislation, of which they availed themselves to the utmost. By means of auction sales of country lands at the upset price of 20s. per acre, of unconditional selections of lots not bid for at auction, of purchases made in virtue of improvements, and of the right of pre-emption to certain lands under the old Acts of Council, the accumulation of immense estates was greatly facilitated. The sales of lands subject to conditions of residence and improvements, though ostensibly made to foster the settlement of a numerous class of small farmers, were also utilised in the interests of station owners, to whom the purchases were transferred in great numbers immediately upon completion of the conditions of residence and improvements required under the Act. The evils resulting from the antagonistic interests of these two classes of settlers were partly checked by the amended law of 1884, which put a stop to the wholesale alienation of land by auction, unconditional selection after auction, and sales in virtue of pre-emptive rights. The clause relating to improvement purchases was also modified, and made applicable only to small areas in gold-fields which might be purchased by resident miners in view of certain improvements; and the area to be offered at auction sales was restricted to a maximum of 200,000 acres yearly; but conditional settlement was favoured by permitting the maximum area allowed to be taken up by free selectors to be considerably increased, the conditions of residence being increased to five years instead of three, and the fulfilment of the conditions of fencing and improvements rendered more stringent.

These regulations, however, did not, in any sense, fulfil the expectation of the legislators in regard to settling a yeomanry upon the soil, as the figures relating to transfers of conditional purchases show that, when other means of increasing the area of individual estates failed, the traffic in transfers of conditionally-purchased lands, with increased areas, supplied the deficiency. The radical change introduced by the Land Act of 1895, necessitating continuous residence for a period of ten years in respect of original conditional purchases, and a further term of not less than five years in connection with additional purchases, has had the effect of considerably reducing the number of applications lodged. The following table shows the transactions under each class of conditional purchase during the last ten years:—

Year.	Original Conditional Purchases.		Additional Conditional Purchases.		Non-residential Conditional Purchases.		Conditional Purchase Leases—application to convert into C.P. received.		Total.	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
		acres.		acres.		acres.		acres.		acres.
1899	941	120,796	788	177,914	41	4,403	...	...	1,770	303,113
1900	1,100	144,241	1,122	288,177	31	2,698	...	...	2,253	435,116
1901	1,036	145,990	1,216	401,625	25	2,283	...	...	2,277	549,898
1902	1,048	128,649	1,231	267,006	61	5,055	...	...	2,340	400,710
1903	980	117,538	1,073	209,122	60	6,237	...	...	2,113	332,897
1904	1,132	161,127	1,760	363,491	30	3,484	...	...	2,922	528,102
1905*	657	99,601	776	143,936	23	1,931	...	...	1,456	245,468
1906†	1,438	212,744	1,647	280,386	38	3,651	...	...	3,123	496,781
1907†	1,535	200,852	2,122	476,345	52	5,956	14	2,642	3,723	685,795
1908†	1,618	229,044	2,103	486,491	113	16,370	11	2 220	3,850	734,125

\* Half-year ended 30th June.

† Year ended 30th June.

The experience of the past ten years goes to show that the new features introduced by the Land Act of 1895 are meeting with considerable favour at the hands of those desirous of acquiring a holding for themselves, notwithstanding the fact that the residence involved is continuous and for a lengthy period. The following table indicates the operations in respect of homestead selections and settlement leases since 1899:—

Year.	Homestead Selections.		Settlement Leases.	
	No.	Area.	No.	Area.
		acres.		acres.
1899	833	329,128	413	1,138,726
1900	609	260,568	189	480,846
1901	524	203,309	289	866,151
1902	387	145,836	109	371,726
1903	240	96,715	105	352,707
1904	1,040	618,075	494	1,214,993
1905*	263	104,860	148	412,245
1906†	383	158,739	271	967,838
1907†	291	89,426	215	680,187
1908†	408	103,412	170	613,934

\* Half-year ended 30th June.

† Year ended 30th June.

The principal element which contributed to the aggregation of great landed estates was that of auction sales of country lands, which were measured in vast areas upon the application of the run-holders, who bought them up generally at the upset price—at first a minimum of £1 per acre, raised in 1878 to £1 5s. per acre.

Particulars of the auction sales of country lands from the year 1862 to the 30th June, 1908, inclusive, are given hereunder.

Year.	Lots.	Total Area.	Amount realised.	Average Price per Acre.
	No.	acres.	£	£ s. d.
1862-1872	9,228	582,479	616,399	1 1 2
1873-1883	43,465	7,963,093	8,640,098	1 1 8
1884-1894	8,631	645,770	1,222,271	1 17 10
1895-1904	5,553	397,386	675,178	1 14 0
1905*	269	20,152	28,829	1 8 7
1906†	496	18,119	32,877	1 16 3
1907†	484	20,094	32,009	1 11 10
1908†	416	9,000	19,368	2 3 0
Total ...	68,542	9,656,093	11,267,029	1 3 4

\* Half year ended 30th June.

† Year ended 30th June.

These figures show that the struggle between selector and squatter did not begin in earnest until about the year 1873, when the effects of the legislation of 1861 were felt in an acute form; but during the ten years that followed, this process of defence was applied in a wholesale manner by the pastoral tenants to save their possessions from encroachment through the operations of the selectors. The system was modified by the legislation of 1884, the object of auction sales of country lands now being to obtain revenue by the sale of select parcels of land at a higher average price and in much smaller average areas. Since the year mentioned, this system of alienation has ceased to be of use in consolidating large pastoral estates.

Among other means offered for the unconditional purchase of Crown lands, that of indiscriminate selection at the upset price of lots not bid for at auction also disappeared with the passing of the Act of 1884. During the period 1862 to 1883 when this system of purchase was in operation, 15,750 lots, of a total area of 1,716,976 acres, were selected.

The Crown Lands Act of 1861, when exempting from sale certain leased lands, provided that a lessee should be permitted to exercise a pre-emptive right of purchase over one portion of 640 acres out of each block of 25 square miles.

The lands claimed in virtue of pre-emptive right, a form of alienation which was also abolished by the Crown Lands Act of 1884, added 2,114 lots, representing 560,825 acres, to the areas bought in the interests of the pastoralists.

The consolidation of pastoral estates did not suffer a serious check when the clauses of the Act of 1861, above cited, ceased to operate, as the transfer of conditional purchases supplied fresh means by the gradual absorption of a very large number of selections, principally in the Central and Western Divisions.

It must be remembered, however, that a proportion of these transfers was made by way of mortgage, and therefore it is not possible to ascertain the area absolutely transferred by the original selectors; but that 22,352,125 acres out of the total area alienated should be contained in 728 holdings, giving to each one an average domain of 30,703 acres, is certainly not conducive to healthy settlement. The number of holdings, however, does not represent the number of owners interested, as in not a few cases these large estates are held in partnership by three or four persons, or by companies and financial corporations.

## RURAL SETTLEMENT.

EXCLUDING from consideration land held by the tenants of the Crown, there were in the State of New South Wales at the end of March, 1908, 81,732 holdings of 1 acre and upwards in extent. These holdings consist of land acquired from the Crown by grant or purchase. Twenty-seven years previously the number of such holdings was 39,992. The number has increased during the period by over 104 per cent., while the area comprised in the holdings advanced from 24,193,318 acres to 49,901,837 acres, the increase representing over 106 per cent. The average area of alienated holdings gradually rose from 569 acres in 1880 to 770 acres in 1883; between 1884 and 1892 this average increased very little, while since 1893 the figures exhibit a downward movement, falling to 611 acres in 1908. This decline in the average area is due to the increase in the number of small holdings, the advance in this respect having been pronounced since 1872. The following table shows the annual averages at intervals since 1880:—

Year ended 31st March.	Average size of Holding.	Year ended 31st March.	Average size of Holding.
	acres.		acres.
1880	569	1903	654
1885	762	1904	641
1890	787	1905	635
1895	707	1906	632
1900	662	1907	625
1901	663	1908	611
1902	658		

The subjoined table shows the number of holdings in different classes at various terms of the period named:—

Area.	Year ended 31st March.						
	1880.	1885.	1890.	1895.	1900.	1905.	1908.
	No.	No.	No.	No.	No.	No.	No.
Under 16 acres...	4,974	5,409	7,290	12,301	16,631	20,584	23,591
16 to 200 acres...	21,302	20,998	22,048	25,707	28,971	30,261	30,908
201 to 400 acres...	6,199	6,363	6,774	8,299	8,780	9,582	10,451
401 to 1,000 acres...	4,964	6,497	6,849	7,569	8,132	9,011	9,874
1,001 to 2,000 acres...	1,212	1,886	2,191	2,475	2,728	3,161	3,587
2,001 to 10,000 acres...	940	1,413	3,910	2,013	2,162	2,351	2,593
10,001 acres and upwards	327	513	658	656	694	722	728
Total ...	39,918	43,079	49,720	59,020	68,098	75,672	81,732

The holdings under 16 acres in extent are, generally speaking, in the vicinity of towns, and consist mainly of gardens or orchards, and the large increase in their number is what would naturally be expected from the growing demand for their produce by a large urban population. The least satisfactory feature in the table is the fact that the number of holdings of moderate size does not greatly increase. In 1880 the holdings having an area of from 16 to 400 acres numbered 27,501, while in 1908 they numbered 41,359, showing an advance of only 50 per cent. On the other hand, the larger holdings have increased at more than twice that rate; for the year ended 31st March, 1908, there were 16,782 holdings of 401 acres and upwards in extent, compared with 7,443 in 1880, or an

increase of over 125 per cent. during this short period. The area of holdings, as returned by occupiers, in quinquennial periods since 1880, is given below :—

Year ended 31st March.	Total Area of Holdings.	Year ended 31st March.	Total Area of Holdings.
	acres.		acres.
1880	22,721,603	1905	48,081,314
1885	32,843,317	1906	48,728,542
1890	37,497,889	1907	49,415,883
1895	41,736,073	1908	49,901,837
1900	45,086,209		

The area of unenclosed land in 1880 amounted to rather more than one-fifth of the total extent of the holdings; but in the beginning of 1908 the area unenclosed was only 1,271,965 acres, being 2·5 per cent. of the total area occupied. This result is due partly to the operation of legislation, and partly to the saving of labour which fencing enables occupiers to effect.

For the purpose of an examination of the statistics showing the present state of the settlement of alienated land in New South Wales, it is found convenient to extend the inquiry successively to the various parts of the State in the order in which they were opened up, following the march of settlement in each of the zones into which the country may be geographically divided, viz., the coast, the tableland, the western slope of the Great Dividing Range, the western plains, Riverina, and the Western Division. Each zone, having its own special character, offers to the settler different natural resources according to its climatic conditions. Proceeding from the metropolis as a centre, settlement extended first along the coast, then to the central and more readily accessible parts of the tableland, following afterwards the course of the great inland rivers towards the southern and western parts of the State; thence to the great plains of the west, spreading slowly across the river Darling to the confines of the territory.

Nature assisted by legislation contributed to the shaping of settlement into its present form—the natural course of events, however, being at times interrupted by sudden rushes of population to points scattered over the surface of the country, even to its remotest extremities. From the tables which follow it will be seen that the holdings are distributed into series of various areas, comprising four distinct classes of holders of alienated land, viz:—(1) Persons who occupy their own freeholds; (2) persons occupying holdings which they rent from the freeholders; (3) owners of land who rent from other private owners lands which they work in addition to their own freeholds; (4) persons who, in addition to alienated land, either freehold or rented from private owners, rent from the Crown areas which are generally devoted to the depasturing of stock. In some districts the system of working on shares is to a certain extent in vogue—the owner finding the land and capital to work the farms, and the other party the labour. This system has not yet attained sufficient importance to warrant a special record of the particulars regarding the land worked under it, for out of a total area of 2,362,590 acres under cultivation on alienated holdings, only 348,444 acres are tilled on the share system, 125,546 acres of which are situated within the Riverina Division.

#### COASTAL DIVISION.

That part of the county of Cumberland which embraces the area of the metropolis and its suburbs is outside the limits of this examination, as it is not intended to inquire into the present condition of urban settlement;

but it may be stated, nevertheless, that as regards the subdivisions and the distribution of landed property in the city and suburbs of Sydney there is now little difference between this and much older communities. The figures given below refer only to rural settlement in the remaining portion of this county, where the first attempts to colonise were made.

From the county of Cumberland settlement advanced westward, and after the alluvial lands of the Hawkesbury and Nepean valleys had been occupied and covered with prosperous farms, the lower portion of the valley of the river Hunter, abounding with natural resources, mineral as well as agricultural, soon attracted settlers, and at the present time more population is concentrated in this district than in any other part of New South Wales outside the metropolitan area. Settlement gradually extended to the whole of the watershed of the Hunter and Manning Rivers.

The North Coast district, which is occupied by an industrious farming population, exhibits the best and most satisfactory results as regards settlement. The occupation of the land has extended very rapidly during recent years along the banks of the rivers which empty into the Pacific Ocean.

In the earlier portion of last century settlement took a southerly direction from the metropolis, and extended rapidly along the lower valleys of the rivers of the South Coast, where the best lands were alienated in grants of large areas to a few families. Later on, however, the nature of the country and a more intelligent apprehension of the principles which should guide settlement brought about the subdivision of these large estates into numerous and comparatively small holdings, which are at present cultivated by a fairly prosperous tenantry.

The following table shows the occupation of alienated holdings in the Coastal Division:—

Counties.	Occupiers of—					Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Holdings of Alienated and Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	acres.	acres.	acres.
Metropolitan—County of Cumberland.	9,897	2,773	525	24	13,219	378,335	160,543	538,878
Hunter and Manning—								
Macquarie .. .. .	1,171	537	157	396	2,261	332,658	93,708	426,366
Gloucester .. .. .	1,032	266	60	400	1,758	686,918	86,728	773,646
Northumberland .. .. .	2,646	1,196	264	104	4,210	410,947	188,559	599,506
Hawes .. .. .	8	..	..	118	126	132,862	910	133,772
Durham .. .. .	862	621	179	260	1,862	716,687	206,212	916,899
Hunter .. .. .	153	59	19	103	334	116,483	47,459	163,942
Brisbane .. .. .	473	119	85	247	924	867,706	81,018	948,724
Total .. .. .	6,285	2,798	764	1,628	11,475	3,264,261	698,594	3,962,855
North Coast—								
Bous .. .. .	2,617	1,309	156	243	4,325	616,540	179,976	796,516
Richmond .. .. .	500	141	34	101	776	217,017	28,071	245,088
Clarence .. .. .	973	476	170	267	1,886	219,900	61,739	281,639
Fitzroy .. .. .	552	64	36	179	831	190,747	11,814	202,561
Raleigh .. .. .	606	127	40	229	1,002	120,805	21,597	142,402
Dudley .. .. .	293	237	83	115	728	119,808	36,602	156,410
Total .. .. .	5,541	2,354	519	1,134	9,548	1,484,817	339,799	1,824,616
South Coast—								
Camden .. .. .	2,038	1,338	461	123	3,960	417,323	260,579	677,902
St. Vincent .. .. .	726	204	143	289	1,457	238,139	101,976	340,115
Dampier .. .. .	352	132	74	124	682	172,576	44,589	217,115
Auckland .. .. .	560	207	114	182	1,063	297,760	78,288	376,048
Total .. .. .	3,676	1,971	797	718	7,162	1,175,798	485,332	1,661,130
Total, Coastal Division .. .. .	25,399	9,896	2,605	3,504	41,404	6,298,211	1,634,318	7,932,529

The total area of this division is 22,355,401 acres, of which 7,982,529 acres, or 35.71 per cent., are alienated. There are 25,399 occupiers of their own freeholds, 9,896 tenants of private rented land, 2,605 persons occupying both their own and private rented land, and 3,504 holders of alienated and Crown lands. The area of alienated land enclosed is 7,065,981 acres.

There are also 5,253,495 acres of Crown lands held under various forms of lease, making the total area under occupation 13,236,024 acres. The area of Crown land enclosed is 1,724,560 acres. The number of lessees occupying Crown lands only is 617.

Outside the county of Cumberland, the largest amount of settlement has taken place in counties Rous, Northumberland, and Camden.

From the foregoing a fairly clear idea may be obtained of the present state of rural settlement in the valleys of the northern coastal rivers, and in the country extending from the sea to the first slopes of the Great Dividing Range. Geographical features and climate are the main elements in determining the occupation of the soil, irrespective of administrative boundaries. In this part of the State the settlement of the public lands has proceeded in a way very different from that of the tableland, which extends from north to south, and divides the rich agricultural valleys of the coastal rivers and their broken mountainous watershed from the immense plains of the western district.

#### TABLELAND DIVISION.

After the difficulties which were blocking extension from the coast to the interior had been overcome, the pioneers of settlement penetrated to the central tableland, thence to the south and the north, and afterwards gradually spread over the whole of the Great Western interior. At first they followed the courses of the great rivers, and occupied, little by little, all the available land, until at the present time only a small proportion of country remains untenanted.

In the northern tableland the disproportion between freeholders and tenants is strongly marked, the latter forming a very small minority of the occupiers of alienated land.

The following statement shows the actual state of rural settlement in the tablelands:—

Counties.	Occupiers of—					Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Holdings of Alienated and Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	acres.	acres.	acres.
Northern Tableland—								
Buller .. .. .	52	1	..	153	206	85,553	846	86,399
Drake .. .. .	17	12	1	29	59	137,196	3,777	140,973
Gresham .. .. .	16	..	2	13	31	22,513	519	23,032
Clarke .. .. .	31	8	..	233	272	195,096	11,900	206,996
Vernon .. .. .	113	23	5	185	326	364,837	3,258	368,095
Clive .. .. .	192	17	94	323	626	173,024	4,661	177,695
Gough .. .. .	567	165	67	362	1,161	545,629	25,848	571,477
Hardinge .. .. .	140	34	6	309	489	352,318	9,622	361,940
Sandon .. .. .	610	145	57	182	994	561,511	24,502	586,013
Total .. .. .	1,738	405	232	1,789	4,164	2,437,687	84,933	2,522,620

Counties.	Occupiers of —					Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Holdings of Alienated and Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	acres.	acres.	acres.
Central Tableland—								
Cook .. .. .	1,379	193	146	74	1,792	182,357	37,967	200,324
Westmoreland .. .. .	243	63	35	295	644	201,230	55,779	257,009
Bligh .. .. .	184	22	15	237	488	586,382	24,811	611,193
Phillip .. .. .	361	103	38	316	821	313,612	39,024	357,636
Roxburgh .. .. .	403	140	57	281	8-1	251,672	74,366	326,038
Georgiana .. .. .	163	44	35	499	741	349,053	35,563	384,556
Wellington .. .. .	570	244	13	393	1,270	477,322	49,700	526,022
Bathurst .. .. .	953	487	173	245	1,853	702,311	153,635	856,446
Total .. .. .	4,241	1,292	572	2,390	8,495	3,049,439	469,755	3,519,224
Southern Tableland—								
Argyle .. .. .	646	229	111	342	1,328	586,137	158,872	745,009
Murray .. .. .	397	141	92	323	958	756,902	111,368	868,270
Beresford .. .. .	178	24	45	243	490	361,290	8,553	370,243
Wellesley .. .. .	238	78	40	199	605	570,197	34,725	604,922
King .. .. .	435	138	69	434	1,146	621,142	58,760	679,902
Cowley .. .. .	26	5	2	100	133	133,160	13,023	146,183
Wallace .. .. .	156	29	10	301	496	425,372	22,490	447,862
Total .. .. .	2,176	664	369	1,947	5,156	3,454,200	408,196	3,862,396
Total, Tableland Division .. .. .	8,155	2,361	1,173	6,126	17,815	8,941,326	962,914	9,904,240

The alienated area represents 38·34 per cent. of the total area of this division, 25,831,246 acres. The extent of freehold land is 8,941,326 acres, or 90·28 per cent. of the alienated area. The total number of occupiers of alienated holdings is 17,815, of whom 8,155 occupy their own land, 2,361 are private tenants, 1,173 occupy both descriptions of alienated lands, and 6,126 occupy areas of Crown land in addition to alienated. The persons who lease only Crown land number 734. There are 10,744,653 acres of Crown land occupied in this division—7,956,255 acres enclosed, and 2,788,398 acres unenclosed.

The counties showing most settlement are Bathurst, Cook, and Wellington in the centre; Gough in the north; and Argyle and King in the south.

#### WESTERN SLOPES.

The districts situated on the Western slope of the Great Dividing Range mark the transition between the agricultural settlements of the west and tableland, and the purely pastoral settlements of the Great Western plains. The extent of arable land in the divisions comprised in the Western slopes is very considerable, but in proportion to the total area of holdings little is devoted to cultivation, as it is more advantageous at present to use the land for grazing purposes, distance from the markets being the principal obstacle to a rapid extension of agriculture. Notwithstanding this, however, a considerable impetus has been given to agriculture during the last ten years.

It will be noticed that the proportion of land alienated diminishes considerably as the districts on the Western slope are reached, except in those parts where the excellence of the land for grazing purposes, and even for agriculture, impelled the pastoral tenants of the Crown some years ago to secure their holdings from the incursions of the free selector—whom the Act ostensibly intended to favour—by means of systematic purchases under the auction sale and improvement clauses of the Land Act of 1861. In the North-western districts the freehold estates are neither so numerous nor of such enormous extent as those in the south.

In the South-western slope which is traversed by the principal permanent rivers of western New South Wales, the land has been alienated in a wholesale fashion, and immense areas of freehold land are in the hands of a comparatively small number of landholders. The state of settlement in the counties situated on the Western slopes of the Great Dividing Range may be gathered from the following table:—

Counties.	Occupiers of—					Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Holdings of Alienated and Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	acres.	acres.	acres.
<b>North-western Slope—</b>								
Arrawatta .. .. .	156	17	5	202	380	314,764	8,659	323,423
Darling .. .. .	149	34	38	226	447	375,741	31,152	406,893
Ingليس .. .. .	196	51	9	165	421	193,949	10,208	209,157
Parry .. .. .	308	95	19	164	586	570,407	21,792	592,199
Buckland .. .. .	275	44	92	124	535	723,764	14,627	738,391
Burnett .. .. .	107	8	2	123	240	434,447	3,506	437,953
Murchison .. .. .	276	36	14	189	515	288,518	13,484	302,002
Nandewar .. .. .	160	24	1	141	326	321,403	7,715	329,118
Pottinger .. .. .	411	33	14	175	633	1,063,378	11,031	1,074,409
<b>Total .. .. .</b>	<b>2,038</b>	<b>342</b>	<b>194</b>	<b>1,509</b>	<b>4,083</b>	<b>4,291,371</b>	<b>122,174</b>	<b>4,413,545</b>
<b>Central-western Slope—</b>								
Napier .. .. .	48	11	3	36	98	177,150	8,472	185,622
Gowen .. .. .	115	25	12	195	347	261,244	11,016	272,260
Lincoln .. .. .	273	68	25	282	648	335,604	20,615	356,219
Gordon .. .. .	195	53	13	181	442	349,379	17,958	367,337
Ashburnham .. .. .	1,024	168	57	395	1,644	744,548	44,917	789,465
Forbes .. .. .	334	40	18	168	560	629,380	19,155	648,535
<b>Total .. .. .</b>	<b>1,939</b>	<b>365</b>	<b>128</b>	<b>1,257</b>	<b>3,739</b>	<b>2,397,305</b>	<b>122,133</b>	<b>2,519,438</b>
<b>South-western Slope—</b>								
Monteagle .. .. .	683	72	32	134	921	540,223	37,716	577,939
Harden .. .. .	589	98	110	173	970	880,362	59,303	939,665
Buccleuch .. .. .	119	83	17	144	363	198,801	31,808	230,609
Selwyn .. .. .	132	21	6	98	257	217,502	25,770	243,272
Bland .. .. .	533	35	11	295	874	357,793	23,185	380,978
Clarendon .. .. .	489	120	44	74	727	611,357	47,200	658,557
Wynyard .. .. .	641	187	55	229	1,112	595,319	60,171	655,490
Goulburn .. .. .	460	122	53	95	730	549,218	97,532	646,750
<b>Total .. .. .</b>	<b>3,646</b>	<b>738</b>	<b>328</b>	<b>1,242</b>	<b>5,954</b>	<b>4,450,575</b>	<b>332,685</b>	<b>4,833,260</b>
<b>Total, Western Slopes Division ..</b>	<b>7,673</b>	<b>1,445</b>	<b>650</b>	<b>4,008</b>	<b>13,776</b>	<b>11,139,251</b>	<b>626,992</b>	<b>11,766,243</b>

The total area of this division is 24,251,881 acres, of which 11,766,243 acres, or 48.52 per cent., are alienated. The percentage of land held by tenants is very small, being only 5.33. The holders of rural lands number 13,776, of whom 7,673 occupy their own freeholds. Only 1,445 are private tenants, 650 rent private lands in addition to their own, and 4,008 occupy areas of Crown land, generally for pastoral purposes, in addition to alienated land. There are also 1,042 persons who occupy Crown land only.

Practically the whole of the alienated area in this division is enclosed, only 55,664 acres remaining unfenced. The area of Crown land occupied is 9,107,949 acres, of which 7,899,371 acres are enclosed. The total area of alienated and Crown land occupied is 20,874,192 acres—1,080,177 acres are cultivated, and 19,794,015 acres are used for pastoral and dairying purposes.

## WESTERN PLAINS AND RIVERINA.

The Riverina may be considered as the most important division of the State, not only on account of the aggregate area alienated, but also from the fact that it contains a considerably larger area under cultivation than any other division, at the same time the average size of the holdings is extremely large. In Urana and Cadell the proportion of alienated area is nearly 94 per cent. of the area of the countries. The occupation of alienated land in the Western Plains and Riverina is shown in the following table:—

Counties.	Occupiers of—					Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Holdings of Alienated and Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	acres.	acres.	acres.
North-western Plain—								
Stapylton .. .. .	38	2	2	59	101	234,073	6,157	290,230
Courallie .. .. .	98	29	7	101	221	694,141	7,579	701,720
Jamison .. .. .	37	3	..	109	149	432,063	3,165	435,228
White .. .. .	104	16	7	37	164	71,323	2,962	74,285
Benarba .. .. .	25	3	3	89	120	393,854	3,271	397,125
Denham .. .. .	4	1	..	40	45	198,673	8,000	206,733
Baradine .. .. .	53	13	2	96	164	153,753	2,035	160,788
Total .. .. .	354	58	21	531	964	2,282,880	33,229	2,316,109
Central-western Plain—								
Leichhardt .. .. .	80	16	4	166	266	714,399	4,606	719,005
Ewenmar .. .. .	59	16	1	163	239	446,900	10,762	457,662
Narromine .. .. .	301	20	4	139	464	369,733	10,781	380,564
Kennedy .. .. .	36	..	..	101	137	207,369	1,299	208,668
Cunningham .. .. .	134	8	5	178	325	402,026	7,693	409,719
Gipps .. .. .	30	9	..	160	199	520,931	50,092	571,023
Clyde ( <i>Central portion</i> ) .. .. .	7	..	..	20	27	50,324	..	50,324
Gregory ( <i>Central portion</i> ) .. .. .	24	8	..	94	126	630,370	7,304	638,174
Oxley .. .. .	110	17	1	62	190	273,424	3,575	276,999
Canbelego ( <i>Central portion</i> ) .. .. .	13	..	..	31	44	34,579	..	34,579
Flinders .. .. .	11	1	1	33	46	69,602	96	69,698
Total .. .. .	805	95	16	1,147	2,063	3,719,707	96,708	3,816,415
Total, Western Plains .. .. .	1,159	153	37	1,678	3,027	6,002,587	129,937	6,132,524
Riverina—								
Bourke .. .. .	651	49	19	138	857	844,591	27,641	872,232
Mitchell .. .. .	335	41	16	61	453	676,924	52,639	729,563
Hume .. .. .	524	83	37	37	681	724,284	65,148	789,432
Dowling .. .. .	12	..	..	54	66	123,368	2,008	125,371
Cooper .. .. .	133	20	4	93	250	775,624	17,863	793,487
Urana .. .. .	492	23	35	55	605	1,311,051	34,687	1,345,738
Denison .. .. .	375	34	20	22	451	599,759	47,087	646,846
Nicholson .. .. .	76	6	2	68	152	360,906	12,393	373,299
Sturt .. .. .	6	3	..	33	42	570,525	12,277	582,802
Boyd .. .. .	69	4	2	15	90	815,791	8,028	823,819
Townsend .. .. .	177	23	42	78	325	1,746,520	43,789	1,790,309
Cadell .. .. .	176	20	19	24	239	512,508	19,662	532,170
Waradgery .. .. .	71	11	6	66	154	945,159	16,394	961,553
Wakool .. .. .	42	5	5	114	166	1,209,269	56,325	1,265,595
Caira ( <i>Central portion</i> ) .. .. .	7	..	..	10	17	263,736	960	264,696
Total .. .. .	3,146	327	207	868	4,545	11,980,015	416,897	12,396,912
Total, Western Plains and Riverina Division.	4,305	480	244	2,546	7,575	17,982,602	546,834	18,529,436

The total area alienated is 18,529,436 acres, or 40·43 per cent. of the total area of the division. The greater portion of this land is enclosed, only 87,522 acres being open. The number of holders occupying their own land is 4,305, out of a total of 7,575 occupiers. In addition there are 1,533 persons who lease Crown lands only. In this division there are under lease 21,645,019 acres of Crown land, of which 20,660,449 acres are enclosed.

## THE WESTERN DIVISION.

In the extreme west of the State, settlement is making but slow progress. With the exception of the great mining centre of Broken Hill, situated on the boundary of the neighbouring State of South Australia, around which a large population has settled, the whole of this vast portion of the domain of New South Wales is given up to the depasturing of stock. Owing to the closer settlement of the country to the east of the Darling, and the more favourable climatic conditions, the counties in this district have been shown separately from those west of the Darling, where the general character of the country militates against agricultural production and the successful rearing of cattle, sheep-breeding being practically the only industry. The present state of settlement on the Western Plains is illustrated by the figures given below:—

Counties.	Occupiers of—						Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Holdings of Alienated and Crown Lands.	Total.		Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	acres.	acres.	acres.	
East of Darling—									
Clyde (part of) .. .. .	22	1	..	13	36	118,240	1,852	120,092	
Gregory (part of) .. .. .	..	..	..	3	3	40,674	..	40,674	
Cowper .. .. .	24	8	1	29	62	56,655	214	56,869	
Canbelego (part of) .. .. .	5	..	..	4	9	1,020	..	1,020	
Robinson .. .. .	45	1	1	14	61	14,067	641	14,708	
Mouramba .. .. .	38	6	..	14	58	12,873	210	13,083	
Blaxland .. .. .	24	1	1	22	48	74,114	424	74,538	
Mossiel .. .. .	5	..	1	14	20	36,916	150	37,066	
Franklin .. .. .	1	3	2	25	31	188,271	6,880	195,151	
Waljeers .. .. .	17	8	..	14	39	245,320	2,315	247,635	
Caira (part of) .. .. .	37	9	20	12	78	180,551	5,798	186,349	
Yanda .. .. .	7	1	..	7	15	12,615	2	12,617	
Booroondarra .. .. .	2	..	..	7	9	6,650	..	6,650	
Rankin .. .. .	..	1	..	5	6	3,909	173	4,082	
Woore .. .. .	1	1	..	7	9	6,905	120	7,025	
Werunda .. .. .	4	..	..	4	8	5,069	..	5,069	
Manara .. .. .	1	..	..	6	7	31,610	..	31,610	
Killera .. .. .	2	..	1	4	7	13,013	60	13,073	
Tailla .. .. .	17	..	..	10	27	27,016	103	27,119	
Livingstone .. .. .	7	..	..	10	17	14,228	..	14,228	
Perry .. .. .	1	2	..	8	11	41,411	941	42,352	
Wentworth .. .. .	31	7	..	22	60	66,678	2,473	69,151	
Total .. .. .	291	49	27	254	621	1,197,805	22,356	1,220,161	
West of Darling—									
Finch .. .. .	14	3	..	32	49	125,392	1,580	126,972	
Narran .. .. .	14	3	1	20	38	71,203	2,512	73,715	
Gunderbooka .. .. .	14	1	..	16	31	31,507	360	31,867	
Landsborough .. .. .	2	..	..	3	5	6,690	..	6,690	
Killara .. .. .	2	2	..	2	6	6,883	1,014	7,897	
Young .. .. .	30	1	..	14	45	22,873	4	22,877	
Tandora .. .. .	..	..	..	8	8	5,500	..	5,500	
Menindie .. .. .	11	..	..	6	17	13,645	..	13,645	
Windeyer .. .. .	..	1	..	6	7	26,964	2	26,966	
Tara .. .. .	3	..	..	16	19	38,631	4,325	42,956	
Culgoa .. .. .	18	1	..	9	28	23,453	3	23,461	
Irrara .. .. .	8	..	..	8	16	12,101	..	12,101	
Barrona .. .. .	1	..	..	..	1	..	..	..	
Fitzgerald .. .. .	..	..	..	2	2	640	..	640	
Yungulgra .. .. .	38	3	..	12	53	20,532	92	20,624	
Mootwingee .. .. .	..	1	..	6	7	6,381	81	6,462	
Yancoinna .. .. .	136	6	2	18	162	38,476	73	38,549	
Thonleanna .. .. .	1	..	..	3	4	3,900	..	3,900	
Ularara .. .. .	2	1	..	4	7	5,777	35	5,812	
Yantara .. .. .	1	1	..	4	6	4,297	40	4,337	
Farnell .. .. .	11	..	..	2	13	3,191	..	3,191	
Delalah .. .. .	..	..	..	1	1	360	..	360	
Tongowoko .. .. .	1	..	..	4	5	1,961	..	1,961	
Evelyn .. .. .	4	1	..	5	10	20,265	320	20,585	
Poole .. .. .	..	..	..	1	1	120	..	120	
Total .. .. .	311	25	3	202	541	488,787	10,441	499,228	
Total—Western Division ..	602	74	30	456	1,162	1,686,592	32,797	1,719,389	

The proportion of land alienated is only 2·14 per cent. of the total area of this division, being an aggregate of 1,719,389 acres out of 80,368,498 acres which the division is estimated to contain. The total number of holdings is 1,162, of which 602 are freehold, 74 private rented properties, 30 partly freehold and partly private leasehold, and 456 partly alienated and partly Crown land. The land is used for purely pastoral purposes except in the vicinity of townships, where market-gardening and fruit-growing are carried on. The area of alienated land enclosed is 1,651,174 acres.

The area of Crown lands occupied in this division is very large, there being no less than 74,835,512 acres under various forms of lease. The number of lessees of Crown lands is 1,401, of whom 456 occupy Crown lands in addition to their alienated holdings, while 945 occupy Crown lands only.

The total area of alienated lands and Crown lands occupied is 76,554,901 acres.

#### AREA OF HOLDINGS.

The size of the holdings of alienated land and the area cultivated in each division of the State, is shown in the following tables.

The holdings in the Coastal Division may be classified as follows:—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
1 to 30 acres ... ..	17,990	136,954	1·72	29,412	21·48
31 to 400 acres ... ..	19,905	2,739,238	34·31	189,473	6·92
401 to 1,000 acres ... ..	2,442	1,512,640	18·95	35,243	2·33
1,001 to 10,000 acres ... ..	1,012	2,318,865	29·05	22,561	0·97
10,001 acres and upwards ... ..	55	1,274,832	15·97	5,714	0·45
Total ... ..	41,404	7,982,529	100·00	282,403	3·54

There were also 2,836 acres of Crown land under cultivation.

The classification of the holdings in the Tableland Division is shown in the following table:—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
1 to 30 acres ... ..	4,650	32,923	0·33	7,460	12·66
31 to 400 acres ... ..	9,258	1,460,274	14·74	148,991	10·20
401 to 1,000 acres ... ..	2,276	1,434,664	14·49	67,498	4·70
1,001 to 10,000 acres ... ..	1,475	3,842,786	38·80	58,890	1·53
10,001 acres and upwards ... ..	156	3,133,593	31·64	20,516	0·65
Total ... ..	17,815	9,904,240	100·00	303,355	3·06

The average area of the holdings is 556 acres. The land is used both for pastoral and agricultural purposes, and these industries are generally carried on conjointly. The area of Crown lands cultivated is 4,367 acres.

The holdings in the Western Slopes may be classified as under:—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
1 to 30 acres ... ..	3,506	26,286	0·22	6,053	23·03
31 to 400 acres ... ..	5,748	1,030,209	8·76	243,273	23·61
401 to 1,000 acres ... ..	2,631	1,661,139	14·12	301,562	18·15
1,001 to 10,000 acres ... ..	1,702	4,301,918	36·56	328,019	7·62
10,001 acres and upwards ... ..	189	4,746,691	40·34	104,730	2·21
Total ... ..	13,776	11,766,243	100·00	983,637	8·36

The average area of the holdings in this division is 854 acres. In addition to 983,637 acres of alienated land under cultivation, there were 96,540 acres of Crown land.

The classification of holdings in the Western Plains and Riverina Division is shown in the following table:—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
1 to 30 acres ... ..	1,154	7,867	0·04	1,230	15·64
31 to 400 acres ... ..	1,946	380,281	2·05	96,681	25·42
401 to 1,000 acres ... ..	2,379	1,552,281	8·33	266,294	17·16
1,001 to 10,000 acres ... ..	1,807	4,412,521	23·81	297,544	6·74
10,001 acres and upwards ... ..	289	12,176,486	65·72	125,864	1·03
Total ... ..	7,575	18,529,436	100·00	787,613	4·25

The average area of holdings in this division is high, especially in the Riverina, where the estates over 10,000 acres average nearly 50,000 acres in extent. There were 97,164 acres of Crown land under cultivation.

In the Western Division the holdings may be classified as follows:—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
1 to 30 acres ... ..	467	1,812	0·11	174	9·60
31 to 400 acres ... ..	326	45,024	2·62	1,048	2·33
401 to 1,000 acres ... ..	146	98,834	5·75	1,347	1·36
1,001 to 10,000 acres ... ..	184	553,196	32·17	2,133	0·39
10,001 acres and upwards ... ..	39	1,020,523	59·35	880	0·09
Total ... ..	1,162	1,719,389	100·00	5,532	0·32

The area of Crown lands cultivated in this division is 6,640 acres.

It will be gathered from an analysis of the figures which have been given that settlement in New South Wales has hitherto tended towards the concentration into comparatively few hands of the lands alienated to a large number of individual selectors, and that in the great majority of cases the owner of the land is also the occupier. Tenancy, as understood in older settled communities, has made comparatively little progress, 92·28 per cent. of the land alienated being yet in the occupancy of the proprietors themselves, or an area of 46,047,982 acres; whilst only 3,853,855 acres, or 7·72 per cent., are held under lease from the freeholders.

Below will be found the number of holdings of various sizes throughout the State, distinguishing freehold from rented land. It will be understood that here, as elsewhere in this chapter, though reference is made to holders who occupy Crown lands in addition to alienated lands, the area of such Crown lands is not considered in treating of the size of the holdings:—

Size of Holdings.	Number of Holdings.				
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Partly Alienated and partly Crown Lands.	Total.
1 to 30 acres ... ..	19,192	6,619	1,397	559	27,767
31 to 400 acres ... ..	19,596	6,681	2,279	8,627	37,183
401 to 1,000 acres ... ..	4,843	711	632	3,688	9,874
1,001 to 10,000 acres ... ..	2,391	241	370	3,178	6,180
10,001 acres and upwards ... ..	112	4	24	558	728
Total ... ..	46,134	14,256	4,702	16,640	81,732

The alienated area of the holdings referred to in the table just given, whether freehold or rented, will be found in the figures subjoined, which also show the percentage of alienated land to be found in the holdings of each specified size, as well as the proportion each size of holding, whether freehold or rented, bears to the total area alienated :—

Size of Holdings.	Area of Holdings.			Proportion to Total Alienated Area of the State, exclusive of holdings under 1 acre.		
	Freehold.	Rented.	Total.	Freehold.	Rented.	Total.
	acres.	acres.	acres.	per cent.	per cent.	per cent.
1 to 30 acres ... ..	145,919	59,923	205,842	0·29	0·12	0·41
31 to 400 acres ... ..	4,498,321	1,156,705	5,655,026	9·02	2·31	11·33
401 to 1,000 acres ...	5,537,326	722,232	6,259,558	11·10	1·45	12·55
1,001 to 10,000 acres ...	13,978,572	1,450,714	15,429,286	28·01	2·91	30·92
10,001 acres and upwards	21,887,844	464,281	22,352,125	43·86	0·93	44·79
Total ... ..	46,047,982	3,853,855	49,901,837	92·28	7·72	100·00

#### SETTLEMENT AND AGRICULTURE.

Some remarks as to the relative condition of agriculture and of settlement on the alienated rural lands of the State cannot fail to be of interest, especially when read in conjunction with the preceding figures. The following table deals with this question, and the figures carry with them their own explanation :—

Size of Holdings.	Alienated Holdings.	Area Alienated.		Area Cultivated.	
		Total.	Proportion to Total Alienated Area.	Total.	Proportion to Area Alienated.
	No.	acres.	per cent.	acres.	per cent.
1 to 30 acres ... ..	27,767	205,842	0·41	44,329	21·54
31 to 400 acres... ..	37,183	5,655,026	11·33	679,466	12·02
401 to 1,000 acres ... ..	9,874	6,259,558	12·55	671,944	10·73
1,001 to 10,000 acres ... ..	6,180	15,429,286	30·92	709,147	4·60
10,001 acres and upwards ... ..	728	22,352,125	44·79	257,704	1·15
Total... ..	81,732	49,901,837	100·00	2,362,590	4·73

Although the highest proportion of land cultivated in any of these series, when compared with the total area alienated in the State, is found in holdings from 1,001 to 10,000 acres in extent, yet when compared with the aggregate area alienated in the series itself it represents only 4·60 per cent. of it; whilst on the smaller holdings, less than 31 acres in

extent, as much as 21·54 per cent. of the area alienated is under cultivation. The proportion considerably decreases as the higher areas are reached, being reduced to 1·15 per cent. in those over 10,000 acres.

From a table given previously some interesting information may be gleaned with regard to the proportion of the number of owners of land who still occupy their freeholds, those who reside on rented lands, and those who occupy, in addition to their freeholds, lands rented either from private owners or from the Crown; but a more comprehensive view of these two phases of settlement may be obtained by an examination of the following table, in which the holdings are divided into a greater number of categories according to their sizes:—

Size of Holdings.	Holdings consisting of—				
	Freehold Land.	Private Rented Land.	Partly Freehold and partly Private Rented Land.	Partly Alienated and partly Crown Land.	Total.
	No.	No.	No.	No.	No.
1 to 5 acres ... ..	11,453	3,773	663	322	16,211
6 to 15 acres ... ..	5,037	1,779	423	141	7,380
16 to 30 acres ... ..	2,702	1,067	311	96	4,176
31 to 50 acres ... ..	4,128	1,387	328	1,223	7,066
51 to 100 acres ... ..	4,970	2,004	506	1,656	9,136
101 to 200 acres ... ..	5,405	1,949	751	2,425	10,530
201 to 300 acres ... ..	2,902	884	410	1,531	5,727
301 to 400 acres ... ..	2,191	457	284	1,792	4,724
401 to 500 acres ... ..	1,403	260	198	810	2,671
501 to 600 acres ... ..	994	143	140	641	1,918
601 to 700 acres ... ..	1,066	158	112	1,153	2,489
701 to 800 acres ... ..	577	69	73	426	1,145
801 to 900 acres ... ..	416	34	56	329	835
901 to 1,000 acres ... ..	387	47	53	229	816
1,001 to 1,500 acres ... ..	1,172	106	156	1,092	2,526
1,501 to 2,000 acres ... ..	490	44	67	550	1,061
2,001 to 3,000 acres ... ..	386	50	58	598	1,092
3,001 to 4,000 acres ... ..	174	18	43	324	559
4,001 to 5,000 acres ... ..	83	11	24	186	304
5,001 to 7,500 acres ... ..	115	7	16	270	408
7,501 to 10,000 acres ... ..	61	5	6	158	230
10,001 to 15,000 acres ... ..	46	1	11	166	224
15,001 to 20,000 acres ... ..	29	1	5	109	144
20,001 to 30,000 acres ... ..	19	2	4	136	161
30,001 to 40,000 acres ... ..	6	.....	1	48	55
40,001 to 50,000 acres ... ..	4	.....	2	34	40
50,001 acres and upwards ... ..	8	.....	1	95	104
Total ... ..	46,134	14,256	4,702	16,640	81,732

From the above it will be seen that the total number of occupiers of freeholds only is 46,134, the proportion to the total number of occupiers being fairly constant in each size of holdings. Absolute tenants of private lands, who number 14,256, are far more numerous in the smaller classes of holdings, and rapidly diminish both in number and in proportion as the estates become larger. The same is the case with regard to holders of freehold and private rented land, who number only 4,702. The persons who occupy alienated areas with Crown lands attached number 16,640, and 54·5 per cent. of the holdings over 1,000 acres in extent are in this category.

The following table shows the alienated area classified according to the size of private holdings:—

Size of Holdings.	Holdings.		Area Alienated.	
	Number.	Percentage of total Holdings.	Acres.	Percentage of total Alienated Area.
1 to 5 acres... ..	16,211	19·83	41,140	0·08
6 to 15 acres ... ..	7,380	9·03	70,570	0·14
16 to 30 acres ... ..	4,176	5·11	94,132	0·19
31 to 50 acres ... ..	7,066	8·64	294,138	0·59
51 to 100 acres ... ..	9,136	11·18	723,526	1·45
101 to 200 acres ... ..	10,530	12·88	1,579,084	3·17
201 to 300 acres ... ..	5,727	7·01	1,433,760	2·87
301 to 400 acres ... ..	4,724	5·78	1,624,518	3·26
401 to 500 acres ... ..	2,671	3·27	1,224,490	2·45
501 to 600 acres ... ..	1,918	2·35	1,057,838	2·12
601 to 700 acres ... ..	2,489	3·04	1,610,079	3·23
701 to 800 acres ... ..	1,145	1·40	863,922	1·73
801 to 900 acres ... ..	835	1·02	722,195	1·45
901 to 1,000 acres ... ..	816	1·00	781,034	1·57
1,001 to 1,500 acres ... ..	2,526	3·09	3,113,936	6·24
1,501 to 2,000 acres ... ..	1,061	1·30	1,851,438	3·71
2,001 to 3,000 acres ... ..	1,092	1·34	2,691,341	5·39
3,001 to 4,000 acres ... ..	559	0·68	1,931,891	3·87
4,001 to 5,000 acres ... ..	304	0·37	1,364,114	2·73
5,001 to 7,500 acres ... ..	408	0·50	2,482,961	4·98
7,501 to 10,000 acres ... ..	230	0·28	1,993,605	4·00
10,001 to 15,000 acres ... ..	224	0·27	2,746,754	5·50
15,001 to 20,000 acres ... ..	144	0·18	2,498,821	5·01
20,001 to 30,000 acres ... ..	161	0·20	3,884,595	7·78
30,001 to 40,000 acres ... ..	55	0·07	1,898,458	3·80
40,001 to 50,000 acres ... ..	40	0·05	1,802,224	3·61
51,000 acres and upwards ... ..	104	0·13	9,521,273	19·08
Total ... ..	81,732	100·00	49,901,837	100·00

Compared with the previous year's figures, there are increases of 2,706 and 585,954 respectively in the number and acreage of the holdings. The largest increase has, of course, been in the number of small holdings.

Although the aggregate area of holdings exceeding 10,000 acres shows a decrease of nearly 350,000 acres, as compared with the previous year, the area embraced in 728 holdings within this category amounts to no less than 22,352,125 acres.

It is one of the features of the table, that whilst the owners of this class of holding constitute but 0·9 per cent. of the total occupiers, the land held represents 44·78 per cent. of the total area. This is still more accentuated in the case of 104 holdings of 50,001 acres and upwards, which represent only 0·13 per cent. of the total number of holdings, but embrace 19·08 per cent. of the land.

There are 4,871 occupiers of Crown lands only, not connected with alienated holdings. The area of alienated holdings over 1 acre in extent in the State is 49,901,837 acres, and of the Crown lands occupied 121,586,628 acres, making a total of 171,488,465 acres. Of this area, 168,918,328 acres are used for grazing and dairying, and 2,570,137 acres for agriculture.

The figures in regard to holdings represent rural settlement only, and account for 49,901,837 acres out of a total of 51,106,748 acres that have been alienated. The balance of 1,204,911 acres represents lands in cities and towns, and lands dedicated for public purposes.

## RAILWAYS AND TRAMWAYS.

## RAILWAY CONSTRUCTION.

On the 26th September, 1855, the first railway-line (from Sydney to Parramatta), 14 miles in length, was opened for traffic, while the extension to Goulburn was completed by the 27th May, 1869. In the meantime—by the 11th April, 1857—communication had been established between Newcastle and East Maitland.

During the twenty years which followed the opening of the first line, railway construction progressed at a very slow rate, for in 1875, the lines in operation had reached a length of only 435 miles, an average of  $21\frac{1}{4}$  miles per year. In 1875, a slight improvement took place, when 33 miles were opened; but from 1876 to 1889, greater activity was manifested, 1,748 miles being constructed during the period, or a yearly average of 125 miles. This rate of increase was not sustained, only 14 miles being opened in the next three years. During the year ended June, 1893, 154 miles were opened; 150 miles in the succeeding year; and 30 miles in the year ended June, 1895. In the following year no new lines were opened; but during the year ended June, 1897, 108 miles were added, and in the course of the next twelve months, 52 miles. During the ten years ended June, 1908, a further length of 766 miles was brought into use.

From the 7th September, 1899, the private line from Broken Hill to Tarrawingee, 40 miles 7 chains in length, also became the property of the State. Under an agreement between the Railway Commissioners and the Silverton Tramway Company, the Company works this line in conjunction with its own. The Government increased the mileage opened during 1901 by the purchase from private owners of a short line, 4 miles 41 chains in length, between Clyde and Carlingford.

The progress in construction of the State railways of New South Wales may be traced in the statement given below. Included in the mileage are the Campbelltown-Camden, and Yass tramways, which are worked with the railways:—

Period.	Opened during the period.	Total opened at end of period.	Year.	Opened during the year.	Total opened.
	miles.	miles.		miles.	miles.
1855-9	55	55	+1900	105	2,811
1860-4	88	143	+1901	34	2,845
1865-9	175	318	+1902	181	3,026
1870-4	85	403	+1903	112	3,138
1875-9	331	734	+1904	143	3,281
1880-4	884	1,618	+1905	nil.	3,281
+1885-9	553	2,171	+1906	109	3,390
+1890-4	330	2,501	+1907	63	3,453
+1895-9	205	2,706	+1908	19	3,472

† Year ended June.

Of the 3,472 miles in operation on the 30th June, 1908, there were 3,264 miles of single line, 199½ miles of double line, and 8½ miles of line with four tracks.

## RAILWAY SYSTEMS.

The railways of the State are divided into three branches, each representing a system of its own.

The southern system, which is the most important, has several offshoots serving the richest and most thickly-populated districts, and places Sydney, Melbourne, and Adelaide in direct communication. From Culcairn, there are two branch lines, one connecting with Corowa on the Murray River, and the other with Germanton; from The Rock a line extends to Lockhart; from Junee a branch extends to the town of Hay in one direction, and to Finley in another, and places the important district of Riverina in direct communication with Sydney. From Cootamundra a southerly branch carries the line to Tumut, and another in a north-westerly direction through Temora to Wyalong. From Murrumburrah a branch has been constructed to Blayney, on the western line, thus connecting the southern and western systems of the State. From Koorawatha a branch has been laid down to connect Grenfell with the railway system. Nearer the metropolis, the important town of Goulburn is connected with Cooma, bringing the rich pastoral district of Monaro into direct communication with Sydney. From Goulburn a branch line has also been opened to Crookwell. Another small offshoot from the main southern line connects Campbelltown with Camden. Another line that forms part of the southern system has been constructed to Nowra, connecting the metropolis with the coastal district of Illawarra, which is rich in coal and in the produce of agriculture.

The western system of railways extends from Sydney over the Blue Mountains, and has its terminus at Bourke, a distance of 503 miles from the metropolis. Leaving the mountains, the western line, after throwing out a branch from Wallerawang to Mudgee, enters the Bathurst Plains, and connects with the metropolis the rich agricultural lands of the Bathurst, Orange, and Wellington districts. Beyond Dubbo it enters the pastoral country. At Blayney, as before stated, the western line is connected with the southern system by a branch line to Murrumburrah; at Orange a branch connects that town with Forbes on the Lachlan River, and from Parkes, one of the stations on this branch line, an extension to Condobolin on the Lachlan River has been constructed. At Bogan Gate a branch line is under construction to Tullamore, a section as far as Trundle having been opened in August, 1907. Further west, at Dubbo, a branch line extends to Coonamble, and from the main line at Nevertire, a short line extends to the town of Warren, and at Nyngan a branch line connects the important mining district of Cobar with Sydney. From Byrock a line branches off to Brewarrina. The western system also includes a short line from Blacktown to Richmond on the Hawkesbury River.

The northern system originally commenced at Newcastle, but a connecting line has been constructed, making Sydney the head of the whole of the railway systems of the State. This connecting line permits of direct communication between Adelaide, Melbourne, Sydney, and Brisbane, a distance from end to end of 1,808 miles, or altogether between the terminus of Oodnadatta, in South Australia, and Cunnamulla, in Queensland, there is one continuous line of railway, 3,100 miles in length. The northern system has a branch from Werris Creek, *via* Narrabri and Moree, to Inverell, thus placing the Namoi and Gwydir districts in direct communication with the ports of Newcastle and Sydney. There is also a branch line from Narrabri to Walgett, with a further branch at Burren Junction to Collarenebri. A portion of the North Coast railway has been constructed from Murwillumbah,

on the Tweed River, to Grafton, on the Clarence River, having a length of 149 miles, and a section is under construction from Maitland, on the main northern line, to Dungog, a distance of nearly 33 miles. A short line branches off the main northern line at Hornsby, and connects with the north shore of Port Jackson at Milson's Point.

#### CONTROL OF STATE RAILWAYS.

Up to October, 1888, the control of the railways was vested in the Minister for Works, the direct management being undertaken by an officer under the title of Commissioner. But it was recognised that political influence entered unduly into the management of this large public asset, and, as a consequence, the "Government Railways Act of 1888" was passed, since consolidated as the "Government Railways Act, 1901," with the object of removing the management of the railways from political control, and vesting it in three railway Commissioners, who report annually to Parliament and pay net earnings into the Public Revenue. While the avowed object of State railway construction has been to promote settlement, apart from consideration of the profitable working of the lines, the principle has nevertheless been kept in view that in the main the railways should be self-supporting.

#### COMPARISON OF RAILWAY FACILITIES.

The progress of the State railways can be fairly gauged by comparing the population and area of territory to each mile of line open for traffic at different periods. Thus, in 1860 there were 4,979 persons to each mile of line, but by the end of the year 1880 the work of construction had proceeded at a rate so much faster than the increase in population that the average number of persons per mile had fallen to 881, the facilities afforded by the railways being more than five times as great as in the year first named. In 1908 the average population per mile of line was 456. The decrease in the area of territory to each mile of line open has been very rapid, ranging from 4,433·9 square miles in 1860 to 89·39 square miles in 1908. The following statement shows the extension of railway facilities since 1860:—

Year.	Population to each Mile of Line open.	Area to each Mile of Line open.	Year.	Population to each Mile of Line open.	Area to each Mile of Line open.
	No.	sq. miles.		No.	sq. miles.
1860	4,979	4,433·89	1901	466	109·09
1865	2,861	2,170·43	1902	461	102·57
1870	1,471	915·55	1903	452	98·91
1875	1,360	710·23	1904	441	94·60
1880	881	365·57	1905	451	94·60
1885	548	179·20	1906	447	91·56
1890	523	142·24	1907	450	89·88
1895	501	122·63	1908	456	89·39
1900	464	110·41			

In the following table are given the average population and area of territory per mile of line open in the principal countries of the world. It must, however, be recognised that a fair comparison can only be made between this State and other young countries in process of development :—

Countries.	Length of Railway.	Per Mile of Line open.	
		Population.	Area.
	miles.	No.	sq. miles.
United Kingdom ... ..	23,063	1,912	5
France ... ..	24,730	1,587	8
Germany ... ..	35,235	1,721	6
Austria-Hungary ... ..	24,235	1,874	10
Belgium ... ..	2,826	2,369	4
Netherlands ... ..	1,895	2,993	7
Switzerland ... ..	2,969	1,167	5
Sweden ... ..	7,789	685	12
Norway ... ..	1,592	1,458	78
Russia ... ..	40,748	3,664	212
Spain ... ..	8,280	2,247	23
Italy ... ..	10,333	3,256	11
Japan ... ..	4,808	9,916	31
United States ... ..	222,635	377	13
India ... ..	29,097	10,117	61
Canada ... ..	21,518	250	168
Brazil ... ..	10,408	1,669	309
Chili ... ..	3,288	1,034	94
Cape Colony ... ..	3,656	659	76
Argentina ... ..	12,600	451	90
New South Wales ... ..	3,472	456	89
Victoria ... ..	3,400	367	26
Queensland ... ..	3,197	171	210
South Australia ... ..	2,025	197	446
Western Australia ... ..	1,943	139	502
Tasmania ... ..	463	397	57
New Zealand ... ..	2,474	379	54

#### GRADIENTS.

The railways of the State have been constructed with a large proportion of steep gradients, but much has been done during the last few years to reduce some of the heaviest of these. By reducing some of the gradients, and introducing locomotives of greater power than were employed formerly, considerable economy in working, as well as the expediting of traffic, has been effected. However, a great deal remains to be accomplished in the matter

of reducing gradients, as will be seen on reference to the following table, which shows the number of miles on different gradients in June, 1908:—

Gradients.	Southern System.	Western System.	Northern System.	Total.
I in	miles.	miles.	miles.	miles.
18 to 30	3½	1½	.....	5½
31 „ 40	58½	65½	33	156½
41 „ 50	64½	50½	76½	192
51 „ 60	47½	55½	51½	155
61 „ 70	47½	54½	31½	133½
71 „ 80	83½	67	83½	234½
81 „ 90	32½	35½	33½	101½
91 „ 100	65½	86	65½	216½
101 „ 150	112½	118½	107	337½
151 „ 200	68½	63½	59½	191½
201 „ 250	40½	25½	27½	93½
251 „ 300	52½	46½	46½	145½
301 „ level	523	495½	450½	1,468½
Total.....	1,199½	1,166	1,066	3,431½

The above table is exclusive of the Broken Hill-Tarrawingee line, Wollongong Harbour branch line, and the Edgeware Road to Belmore line, of a total length of 41½ miles.

#### COST OF CONSTRUCTION.

The cost of construction of the various branches of the railway systems to the 30th June, 1908, is set forth in the following table. The average cost of the whole of the lines is calculated to be £10,831 per mile, including all charges, except those for rolling-stock, machinery, furniture, and workshops—an amount which is by no means high, considering the character of some parts of the country through which the lines have been carried, and the cost of labour, which is considerably greater in Australia than in most other countries. In considering in detail the figures given, it is interesting to note the comparatively low cost per mile of some of the extensions through pastoral country. These are what is termed the “pioneer” class, and are of a light and cheap kind, on which the produce of the settlers may be conveyed to the trunk lines at a reasonable speed, and at a cheaper rate than carriage by road. The line from Parkes to Condobolin averaged £2,066 per mile; Jerilderie to Berrigan, £2,151 per mile; from Dubbo to Coonamble, £2,402 per mile; from Narrabri to Moree, £2,653 per mile; from Berrigan to Finley, £2,599 per mile; and from Byrock to Brewarrina, £2,683 per mile. The lines of the “pioneer” class, in a special manner, show that in certain districts of the State, railways capable of effectively carrying the traffic can be constructed at an average cost far below what had been previously attempted. In support of this it is pointed out that twenty-three lines, with a total length of 926½ miles, have been constructed at an average cost of £3,086 per mile.

Lines opened for Traffic.	Length.	Total Cost.	Cost per Mile.
	m. ch.	£	£
Darling Harbour Branch, Sydney ... ..	1 42½	903,367	589,954
MAIN SOUTHERN LINE.			
Sydney to Granville ... ..	16 45½	2,664,954	160,812
Granville to Goulburn ... ..	123 27½	2,554,839	20,713
Goulburn to Wagga ... ..	178 59½	1,633,721	9,140
Wagga to Wodonga ... ..	79 17½	915,588	11,557

Lines opened for Traffic.	Length.		Total Cost.	Cost per Mile.
<b>MAIN SOUTHERN LINE—continued.</b>				
<b>BRANCH LINES.</b>				
Campbelltown to Camden	m.	ch.	£	£
Yass Tramway	7	66½	45,532	5,814
Goulburn to Crookwell	2	73	29,230	10,036
Goulburn to Cooma	36	6	159,002	4,408
Murrumburrah to Blayney, on Western Line	130	43½	1,382,545	10,590
Koorawatha to Grenfell	110	30	1,086,611	9,845
Cootamundra to Gundagai	32	13½	109,155	3,394
Gundagai to Tumut	33	55½	323,809	9,610
Cootamundra to Temora	31	34½	203,566	6,477
Temora to Wyalong	38	28½	180,971	4,718
Temora to Ariah Park	41	26½	118,595	2,869
June to Hay	20	24½	55,401	2,728
Narrandera to Jerilderie	168	19½	982,009	5,837
Jerilderie to Berrigan	65	14	408,722	6,271
Berrigan to Finley	21	66	46,936	2,151
The Rock to Lockhart	14	4	36,505	2,599
Culcairn to Germantown	24	52½	77,407	3,139
Culcairn to Corowa	16	61	59,147	3,529
	47	72½	218,452	4,560
<b>MAIN WESTERN LINE.</b>				
Clyde to Carlingford	4	39½	33,470	7,453
Granville to Penrith	19	67	608,316	30,665
Penrith to Bathurst	112	11	2,737,329	24,410
Bathurst to Dubbo	137	67	1,333,924	9,678
Dubbo to Bourke	225	51½	1,360,077	6,028
<b>BRANCH LINES.</b>				
Blacktown to Richmond	16	19½	177,263	10,913
Wallerawang to Mudgee	85	17½	978,630	11,484
Blayney to Murrumburrah (see Southern Line)				
Orange to Molong	23	26	269,277	11,542
Molong to Forbes	72	76½	390,658	5,217
Parkes to Condobolin	62	65	129,796	2,066
Bogan Gate to Trundle	15	77½	43,551	2,727
Dubbo to Coonamble	95	69	230,254	2,402
Nevertire to Warren	12	54½	40,986	3,233
Nyngan to Cobar	81	29	304,010	3,736
Cobar to The Peak	3	54½	15,578	4,235
Byrock to Brewarrina	58	34	156,783	2,683
<b>MAIN NORTHERN LINE.</b>				
Homebush (Sydney) to Waratah	95	39	2,835,967	29,700
Newcastle to Wallangarra	393	57½	5,095,461	12,942
<b>BRANCH LINES.</b>				
Hornsby to Milson's Point (Sydney)	13	24	647,692	48,699
Bullock Island Branch	3	32½	567,826	166,854
Morpeth Branch	3	38½	61,482	17,661
Werris Creek to Narrabri	99	6½	589,715	5,952
Narrabri to Moree	60	00	159,168	2,653
Moree to Inverell	95	65½	313,154	3,268
Narrabri West to Burren Junction	51	56½	149,207	2,886
Burren Junction to Collarenebri East	41	77	100,974	2,406
Burren Junction to Croyon	22	70½	67,433	2,947
Tamworth to Manilla	29	72½	86,624	2,896
<b>NORTH COAST LINE.</b>				
Lismore to Murwillumbah	63	59	908,864	14,260
Lismore to Casino	18	14½	130,596	7,182
Casino to Grafton	67	15½	294,322	4,380
<b>SOUTH COAST (ILLAWARRA) LINE.</b>				
Sydney to Kiama	72	48½	2,016,003	27,766
Kiama to Nowra	22	46½	361,056	15,987
<b>BRANCH LINE.</b>				
Sydenham to Belmore	5	68	196,617	33,610
<b>BROKEN HILL LINE.</b>				
Broken Hill to Tarrawingee	40	7	32,387	808
Total all Lines	3,472	41	37,610,514	10,831

The amount expended on rolling-stock to the 30th June, 1908, was £6,396,243; for machinery, £392,012; on workshops, £674,677; for furniture, £10,038; and Store Advance Account, £600,000; or £8,072,970 in all. This makes the total cost of all lines open for traffic £45,683,484, or an average of £13,156 per mile. The growth of the capital expenditure on lines open may be seen in the following table :—

Year.	Capital expended during period.	Total capital expended on lines open.	Year.	Capital expended during period.	Total capital expended on lines open.
	£	£		£	£
1855-9	1,278,416	1,278,416	1890-4	6,016,104	35,855,271
1860-4	1,353,374	2,631,790	1895-9	2,137,005	37,992,276
1865-9	2,049,539	4,681,329	1900-4	4,296,241	42,288,517
1870-4	2,163,217	6,844,546	1905	4,585,281	43,062,550
1875-9	3,561,949	10,406,495	1906	563,513	43,626,063
1880-4	9,673,643	20,080,138	1907	1,074,167	44,700,230
1885-9	9,759,029	29,839,167	1908	983,254	45,683,484

Of the £45,683,484 expended on lines open for traffic on the 30th June, 1908, an amount of £511,210 has been provided from the Consolidated Revenue of the State, leaving a balance of £45,172,274, which has been raised by the issue of debentures and other stock. It is indicated later on that the net revenue for the year ended 30th June, 1908, after paying working expenses, was £2,229,295, which gave a return of 4·88 per cent. upon the total capital expenditure on the lines open for traffic, and 4·94 per cent. upon the capital on which the country has to pay interest.

The cost of railway construction in the principal countries of the world for which the information is available is shown in the following table. It would, however, be hardly fair to institute a comparison between the cost of construction per mile in New South Wales and in the densely-populated countries of Europe, for while in Europe the resumption of valuable ground is perhaps the heaviest expense in connection with the building of railways, in this State this item of expenditure is not of leading importance. The figures include the whole expense of equipping the lines for traffic, and are brought down to the latest available dates :—

Countries.	Cost per Mile open for Traffic.	Countries.	Cost per Mile open for Traffic.
	£		£
United Kingdom ..	55,799	Argentina ... ..	9,921
France ... ..	28,196	Japan ... ..	8,708
Germany ... ..	20,979	Australasia :—	
Switzerland ... ..	22,089	<i>New South Wales</i> ...	13,156
Belgium ... ..	36,957	Victoria ... ..	12,220
Norway ..	7,705	Queensland ... ..	6,910
Sweden ... ..	6,477	South Australia ...	7,402
Canada ... ..	13,001	Western Australia...	5,524
United States ...	13,735	Tasmania ... ..	8,526
Cape Colony ...	9,809	New Zealand ...	9,849

## REVENUE RETURNS AND WORKING EXPENSES.

The contrast between the present condition of the railways of New South Wales and their humble beginning in 1855 is remarkable. For the first ten years of the period under review the larger part of the railway earnings was obtained from the passenger traffic, no doubt owing to the fact that the first railways were entirely suburban. It was not until the line crossed the mountains and opened up the interior that the proportions changed, and the goods traffic became the principal source of revenue of the railways. This change began to take place in 1867.

A comparison between the earnings of the period prior to 1871—when the net result every year represented only a small portion of the interest due on the capital expended in the construction of the lines—and of the subsequent period, affords matter for satisfaction. The following table shows the gross earnings, working expenses, and the proportion of the expenditure to receipts, in various periods from 1855 up to the 30th June, 1908. Since the year 1887 the railway accounts have been made up to the 30th June in each year:—

Year.	Gross Earnings.	Working Expenses.	Proportion of working expenses to gross earnings.	Year.	Gross Earnings.	Working Expenses.	Proportion of working expenses to gross earnings.
	£	£	per cent.		£	£	per cent.
1855	9,249	5,959	64·4	1890	2,633,086	1,665,835	63·3
1860	62,269	50,427	81·0	1895	2,878,204	1,567,589	54·5
1865	166,032	108,926	65·6	1900	3,163,572	1,769,520	55·9
1870	307,142	206,003	67·1	1905	3,684,016	2,192,147	59·5
1875	614,648	296,174	48·2	1906	4,234,791	2,308,384	54·5
1880	1,161,017	647,719	55·8	1907	4,709,406	2,499,741	53·1
1885	2,174,368	1,458,153	67·1	1908	4,944,134	2,714,839	54·9

With the exception of the years 1902, 1903, and 1904 (the drought years), the proportion of working expenses to gross earnings was considerably less than for the period anterior to the vesting of the railways in the Commissioners. The fact that the lines as a whole have not in the past always returned a profit should occasion no surprise, as the statistics of railways in all parts of the world show that few lines, except perhaps suburban, return anything like a profit during the first few years after their opening.

During the period from 1870 to 1875, when the length of new lines yearly constructed was very small, the railway profits steadily increased. During 1877 and 1878, 180 miles of railway were constructed, and the profits immediately declined. From 1880 to 1884 the railways were extended, chiefly to centres already populous and prosperous, viz., Riverina and New England, and the central districts of Wellington and Dubbo; and as these were years of remarkable prosperity, the railway profits suffered less than usual from the considerable extension, which included the construction of the expensive connecting link joining the New South Wales railways with those of Victoria, at the River Murray. Since 1885 the extensions on the main lines have, for the most part, been through pastoral country, such as the continuation of the Western line to Bourke, the Northern line to Jennings, and the further extensions of the lines on the Goulburn district to the rich pastoral lands of Monaro; while several branch lines have been constructed tapping important agricultural, dairy-farming, and pastoral districts. Expensive new lines result in an increase in the percentage of working expenses

to the gross earnings, as these lines have to be kept in full working order and repair whilst actually returning in gross earnings little more than the cost of maintenance. The small returns on expensive incomplected branches further tend to diminish greatly the profits of the railway system taken as a whole; but such is the history of railway construction in all parts of the world, and New South Wales is no exception to the general rule. The financial depression of 1893, which brought about a great change in the character of the coaching traffic, and the continued unfavourable character of the seasons, adversely affected the earnings of several years. The increased cost of fuel and liberal advances granted to the wages staff materially assisted to augment the working expenses, while the carriage of fodder and the transfer of live-stock during drought years, at rates that were almost unremunerative, contributed greatly towards an increase in the proportion of working expenses to gross earnings.

The following table gives the percentage of earnings from the two sources of railway revenue. It will be observed that in the year 1860 the earnings from passenger traffic largely exceeded those from goods, but after that year the proportion derived from coaching traffic declined, reaching the minimum in 1875. This falling-off was almost entirely due to the considerable extension of the main lines through pastoral country, thinly populated, but well stocked with sheep and cattle, and consequently furnishing the railways with large quantities of produce for carriage to the sea-board. From 1880 to 1889, however, the percentage of receipts from coaching traffic steadily advanced, the proportion in the year last named being as high as 40·4 per cent. of the total revenue. A marked increase is exhibited in the figures for the years 1903, 1904, and 1905, followed by a falling off in the two subsequent years. The proportion for 1907-8 increased, and was equal to that in 1902, the intermediate years showing slight variations:—

Year.	Percentage of Earnings.		Year.	Percentage of Earnings.	
	Coaching Traffic to Total.	Goods Traffic to Total.		Coaching Traffic to Total.	Goods Traffic to Total.
1860	73·0	27·0	1901	38·6	61·4
1865	56·0	44·0	1902	38·3	61·7
1870	38·4	61·6	1903	42·4	57·6
1875	33·5	66·5	1904	42·0	58·0
1880	33·6	66·4	1905	39·9	60·1
1885	38·2	61·8	1906	37·9	62·1
1890	40·2	59·8	1907	37·9	62·1
1895	35·1	64·9	1908	38·4	61·6
1900	38·2	61·8			

#### NET EARNINGS AND INTEREST ON CAPITAL.

The net revenue for the year ended 30th June, 1908, was £2,229,295; while the capital expended on lines open for traffic to that date was £45,683,484. The amount thus available, to meet the interest charges on the capital expended, represents a return of 4·88 per cent., which is 1·35 per cent. in excess of the nominal interest payable on the public debt. In establishing the financial results of the working of the lines, it is the practice of railway authorities to compare the net returns with the nominal rate of interest payable on the railway loans or on the public debt of the State. An accurate comparison, however, can be made only by taking the average rate of interest payable on the actual sum obtained by the State for its outstanding loans, inasmuch as many loans were floated below par. On this basis, the lines of the State have met the interest on construction and equipment during eight years only,

viz., 1881, 1882, 1883, 1889, 1901, 1906, 1907, and 1908. The following table shows the net earnings and the interest returned on the total capital expended on railways, including the cost of both construction and equipment for the year 1855 and subsequent periods:—

Year.	Net Earnings.	Interest on Capital.	Year.	Net Earnings.	Interest on Capital.
	£	per cent.		£	per cent.
1855	3,290	0·63	1900	1,394,052	3·63
1860	11,842	0·83	1901	1,530,578	3·94
1865	57,106	2·07	1902	1,401,317	3·48
1870	101,139	1·81	1903	1,048,594	2·53
1875	318,474	4·39	1904	1,177,473	2·80
1880	513,298	4·35	1905	1,491,869	3·46
1885	716,215	3·37	1906	1,926,407	4·42
1890	967,251	3·17	1907	2,209,665	4·96
1895	1,310,615	3·60	1908	2,229,295	4·88

The table below shows the rate of interest returned on the capital expenditure for each of the last ten years, with the sum by which such return falls short of or exceeds the actual rate of interest payable on the cost of construction. The rate of return on capital represents the interest on the gross cost of the lines. The nominal amount of outstanding debentures and funded stock is less than the actual expenditure on construction and equipment, owing to the fact, as previously stated, that some loans have been redeemed; but as the redemption has been effected by means of fresh loans charged to general services, or by payments from the general revenue, and not out of railway earnings, no allowance on this account can reasonably be claimed:—

Year.	Interest returned on Capital.	Actual rate of Interest payable on Outstanding Loans.	Average Gain (+) or Loss (—).
	per cent.	per cent.	per cent.
1899	3·83	3·75	+0·08
1900	3·63	3·76	—0·13
1901	3·94	3·74	+0·20
1902	3·48	3·63	—0·20
1903	2·53	3·67	—1·14
1904	2·80	3·68	—0·88
1905	3·46	3·63	—0·23
1906	4·42	3·63	+0·74
1907	4·96	3·63	+1·33
1908	4·83	3·65	+1·23

As pointed out previously, the extension of the lines in sparsely populated districts was responsible for a considerable falling off in profits for some years. In any consideration of the financial position of the railways, it must be noted that there are twenty-six branch lines, on which £13,079,366 have been expended, and an annual loss in working of £286,950 has been experienced. Generally speaking, however, the above returns give evidence of considerable improvement during the period; and this satisfactory state of affairs has been attained by careful and economical management. The falling-off noticeable in 1903 and 1904 was due, in a great measure, to the disastrous drought which afflicted a great portion of the State. During those years not only was there a much smaller volume of traffic than usual, but the Commissioners carried starving stock and fodder at rates barely sufficient to cover working expenses.

The railways are owned by the State, and when the net earnings are much in excess of the interest requirements, public opinion at once demands a reduction in freights and rates. This has actually occurred during the last two years.

## EARNINGS AND EXPENSES PER MILE.

Two important facts which demonstrate the financial position of the railways and the character of the management are the earnings per train mile and per average mile open. Although the returns now being realised cannot be compared with those of 1875, when the net earnings per train mile fell a little short of 52d., and per mile open of £776, the earnings, with the exception of those for the drought years 1902, 1903, and 1904 are in every way encouraging. The transactions of the year 1907-8 show a falling off in the net earnings per train mile of 3·41d. from those of the previous year. This result is attributable principally to a large reduction in the rates and fares made early in 1907, and also to a decrease in the tonnage of grain and flour and wool carried. The gross earnings, expenditure, and net earnings per train mile and per average mile open since 1860 are set forth in the following table:—

Year.	Per train mile.			Per average mile open.			Year.	Per train mile.			Per average mile open.		
	Gross Earnings.	Expenditure.	Net Earnings.	Gross Earnings.	Expenditure.	Net Earnings.		Gross Earnings.	Expenditure.	Net Earnings.	Gross Earnings.	Expenditure.	Net Earnings.
	d.	d.	d.	£	£	£		d.	d.	d.	£	£	£
1860	83·37	67·52	15·85	889	720	169	1901	79·68	45·56	34·12	1,286	735	551
1865	82·42	54·07	28·35	1,161	762	399	1902	75·58	46·71	28·87	1,259	778	481
1870	81·81	54·86	26·95	907	608	299	1903	68·89	47·10	21·79	1,093	747	346
1875	100·20	48·28	51·92	1,499	722	777	1904	79·30	52·13	27·17	1,079	709	370
1880	86·02	47·99	38·03	1,475	823	652	1905	81·46	50·26	31·20	1,123	668	455
1885	78·61	53·72	25·89	1,077	877	420	1906	85·67	46·70	38·97	1,258	686	572
1890	78·90	49·91	28·99	1,209	765	444	1907	87·28	46·33	40·95	1,374	729	645
1895	90·96	49·54	41·42	1,144	623	521	1908	83·26	45·72	37·54	1,425	783	642
1900	85·36	47·75	37·61	1,153	645	508							

In many cases the railways of the State pass through heavy and mountainous country, involving steep gradients, some of the worst of which are situated on the trunk lines. For the more expeditious and economical working of the traffic, important deviations have been made and are being carried out to secure better grades and to ease the curves. In the Southern system, the line at Cooma reaches an altitude of 2,659 feet above the sea-level; in the Western, at Clarence Station, Blue Mountains, a height of 3,658 feet is attained; and on the Northern line the highest point, 4,471 feet, is reached at Ben Lomond.

## COACHING AND GOODS TRAFFIC.

*Passenger Traffic.*

The following table shows the number of passengers carried on the lines of the State, together with the receipts derived from the traffic, and the average receipts per journey since 1855:—

Year.	Passenger Journeys.	Receipts from Coaching Traffic.	Average Receipts per Journey.
	No.	£	d.
1855	98,846	9,093	22·08
1860	551,044	45,428	19·79
1865	751,587	92,984	29·69
1870	776,707	117,854	36·42
1875	1,288,225	205,941	38·37
1880	5,440,138	390,149	17·21
1885	13,506,346	830,904	14·76
1890	17,071,945	1,059,791	14·90
1895	19,725,418	1,022,901	12·45
1900	26,486,873	1,227,355	11·12
1905	35,158,150	1,469,018	10·03
1906	37,500,531	1,604,349	10·27
1907	41,413,084	1,782,907	10·33
1908	47,487,030	1,896,720	9·59

There has been a gradual decline in the receipts per journey, due no doubt to the large increase in suburban traffic, and the more general use of second-class carriages by all kinds of travellers.

The number of journeys made by each person in the State now averages 30·0 per annum, as against 7·5 in 1880, and 1·6 in 1870. The increase has been exceedingly rapid, as will be seen from the following table :—

Year.	Number of Journeys.	Year.	Number of Journeys.
1855	0·4	1890	15·8
1860	1·6	1895	15·9
1865	1·9	1900	19·7
1870	1·6	1905	24·1
1875	2·3	1906	24·8
1880	7·5	1907	26·6
1885	14·6	1908	30·0

The traffic on the suburban lines, which comprises distances within 22 miles of Sydney and Newcastle, has enormously increased of late years. In the following table a comparison is instituted between the traffic for the years ended 30th June, 1888, and 1908 :—

Suburban Traffic.	1888.	1908.
Number of ordinary passengers... ..	7,413,863	17,170,130
„ workmen's journeys ... ..	1,738,284	10,751,772
„ season ticket holders' journeys ... ..	3,227,760	13,482,120
Total passenger journeys ... ..	12,379,912	41,404,022
Number of miles travelled ... ..	70,172,793	258,145,729
Average mileage per passenger ... ..	5·67	6·23
Amount received from passengers ... ..	£186,393	£455,021
Average receipts per mile, per passenger ... ..	0·64d.	0·42d.

The average receipts from passenger traffic per head of population advanced very rapidly until 1891, when the amount stood at 20s. 11·8d., against 10s. 8·5d. in 1880, and 4s. 9·7d. in 1870. This was not due so much to the increased distance travelled by passengers as to the fact that the railway mileage increased at a greater rate than the population, enabling the public to indulge in a larger measure of railway travelling, in accordance with the well established rule that the more the facilities for travelling are extended the greater will be the traffic. Subsequently to 1891 the average lessened for a few years, but it now stands at 24s. 1·3d. In this connection it may be interesting to note that the fares charged on the suburban lines, over which the majority of passengers travel, are very much less for both classes of travellers than the English rates, although the cost of working is considerably higher. The receipts from passenger traffic per head of the population will be found in the following figures :—

Year.	Amount per head.	Year.	Amount per head.
	s. d.		s. d.
1860	2 7·8	1895	16 6·1
1865	4 7·8	1900	17 9·5
1870	4 9·7	1905	20 1·2
1875	7 10·2	1906	21 5·4
1880	10 8·5	1907	23 3·5
1885	17 11·1	1908	24 1·3
1890	19 7·1		

*Goods Traffic.*

The following figures, which extend as far back as the first opening of the lines, show how greatly the goods traffic has expanded, especially in recent years :—

Year.	Tonnage of Goods and Live Stock.	Tonnage per head.	Earnings.	Year.	Tonnage of Goods and Live Stock.	Tonnage per head.	Earnings.
			£				£
1855	140	...	156	1890	3,788,950	3·5	1,573,295
1860	55,394	0·2	16,841	1895	4,075,093	3·3	1,855,303
1865	416,707	1·2	73,048	1900	5,531,511	4·1	1,936,217
1870	766,523	1·6	189,288	1905	6,724,215	4·6	2,214,998
1875	1,171,354	2·2	408,707	1906	7,629,492	5·1	2,630,442
1880	1,712,971	2·4	770,868	1907	8,793,832	5·7	2,926,499
1885	3,273,004	3·5	1,343,464	1908	10,175,389	6·5	3,047,414

The weight of goods and live stock carried per head of population in New South Wales compares favourably with that of many countries where railways have long been established.

The largest amount of tonnage per inhabitant is carried in the United States, where it averages 19·1; and the United Kingdom is second with 11·1 tons. The relative position of New South Wales will be seen from the next table, which shows the tonnage of merchandise carried per head of population in the principal countries of the world :—

	Tons.		Tons.
United States ...	19·1	Argentina ...	4·0
United Kingdom ...	11·1	Australasia—	
Belgium ...	8·2	<i>New South Wales</i> ...	6·5
Germany ...	6·9	Victoria ...	3·0
Canada ...	10·8	Queensland ...	4·2
Switzerland ...	3·9	South Australia ...	5·7
Austria-Hungary ...	4·0	Western Australia ...	8·9
Sweden ...	5·1	Tasmania ...	2·4
France ...	3·3	New Zealand ...	5·5

The accompanying statement shows the receipts for carrying goods 1 mile along the lines of the State. The information reaches back to 1872, when the charge was 3·6d., while after an interval of thirty-six years it has fallen to 1·2d. The decrease, however, is to some extent more apparent than real, inasmuch as it represents a more extensive development of the mineral trade than of the carriage of general merchandise; but when due allowance has been made on this score, it will be found that the benefit to the general producer and consumer has been very substantial, especially in regard to agricultural produce and live stock :—

1872 ...	3·6d.	1891 ...	1·9d.	1906 ...	1·3d.
1875 ...	3·1d.	1895 ...	1·6d.	1907 ...	1·3d.
1880 ...	2·3d.	1900 ...	1·5d.	1908 ...	1·2d.
1885 ...	1·9d.	1905 ...	1·2d.		

The revenue from goods and live stock traffic per head of population rose rapidly from the opening of the lines until the year 1883, when it stood at 30s. 4d., at which figure it remained in 1884. Bad seasons in subsequent years caused a falling-off, so that by 1888 the average was only 27s. per inhabitant. For a number of years afterwards there was a steady increase, and in 1892 the average stood at 33s.—the highest figure yet attained; in 1894 this had decreased to 29s. 1d., but in 1895 there was a rise to 29s. 11d. In 1896, owing chiefly to the diminished wool traffic, and partly also to the Newcastle strike, the figures dropped to 28s. 1d.; in 1897, there was a rise to 29s. 11d., but the effect of the drought was noticeable in 1898, when the

average per head dropped to 29s. 2d. An improvement was, however, presented in 1899, 1901, 1902, and in each year from 1905 to 1908, when the average per head rose to 38s. 9d. The results achieved must be regarded as very satisfactory, especially in face of the general reduction in the freights:—

Year.	Amount.	Year.	Amount.
	£ s. d.		£ s. d.
1860	0 0 11·8	1895	1 9 11·3
1865	0 3 7·8	1900	1 8 9·7
1870	0 7 8·7	1905	1 10 3·7
1875	0 13 11·8	1906	1 15 2·0
1880	1 1 1·9	1907	1 18 2·3
1885	1 8 11·7	1908	1 18 8·9
1890	1 9 1·0		

#### *Rolling-stock.*

The rolling-stock of New South Wales Railways, on the 30th June, 1908, consisted of 696 engines, 567 tenders, 1,259 coaching stock, 12,540 goods vehicles, and 1,023 stock for departmental use only, making a total of 16,085 stock. These figures represent an increase of 40 engines, 26 tenders, 72 coaching vehicles, 859 goods vehicles, and a reduction of 15 departmental vehicles on the figures of the previous year. The number of engine miles run was 18,174,185, while the train miles numbered 14,251,052. The fitting of the goods stock with the Westinghouse quick-acting freight brake appliances was completed in 1898-9, and much progress has been made with the work of interlocking of points and signals—Sykes' system of lock and block being introduced on the busy suburban sections.

#### *Railway Accidents.*

The railways of New South Wales have been as free from accidents of a serious character as the lines of most other countries. It is difficult to obtain a common basis of comparison; but so far as the figures can be given, they are shown in the following table, which exhibits the number of passengers killed and injured per million persons carried. The figures are calculated over a period of five years and brought down to the latest available dates:—

Countries.	Accidents per million passengers carried.		Countries.	Accidents per million passengers carried.	
	Killed.	Injured.		Killed.	Injured.
Germany ... ..	0·09	0·41	Russia ... ..	1·06	6·00
Austria-Hungary ...	0·09	1·16	United Kingdom ...	0·24	0·47
Belgium ... ..	0·05	2·15	Spain ... ..	0·70	2·75
Sweden ... ..	0·17	0·29	<i>New South Wales</i> ...	0·09	1·95
France ... ..	0·07	0·78	Victoria ... ..	0·21	5·72
Norway ... ..	0·12	0·08	South Australia ...	0·26	1·26
Netherlands ... ..	0·09	0·56	New Zealand ... ..	0·93	1·59
Switzerland ... ..	0·15	1·08	United States ... ..	0·58	11·59

The above comparison is not perfect, as the question of the distance travelled by each passenger is an important element of the risk run, and is omitted from consideration. If this were made a factor, it would probably be found that the risk of each traveller by rail would show less variation in the different countries than appears to be the case from the figures quoted.

The persons meeting with accidents on railway lines may be grouped under three heads—passengers, employees, and trespassers; and the accidents themselves may be classified into those arising from causes beyond the control of the persons injured, and those due to misconduct or want of caution.

The accidents may be further subdivided into those connected with the movement of railway vehicles and those apart from such movement. Adopting such classifications, the returns for the quinquennial period terminating on the 30th June, 1908, show that only 1 passenger in over 195 million persons carried was killed during the five years under review, and 0·72 passengers per million carried were injured through causes beyond their own control in accidents connected with the movement of railway vehicles. In fact, only one member of the travelling public was fatally injured owing to accidents to passengers trains during the last seven years; while owing to misconduct or want of caution the rates of passengers killed and injured per million carried were 0·09 and 0·90 respectively. Further, 0·33 passengers per million carried were injured in accidents apart from the movement of railway vehicles in consequence of their own misconduct or want of caution.

In the following statement, particulars regarding accidents on the Government Railways of New South Wales are given for three years:—

Classification.	Accidents connected with the Movement of Railway Vehicles.			Accidents not connected with the Movement of Railway Vehicles.		
	1905-6.	1906-7.	1907-8.	1905-6.	1906-7.	1907-8.
Passengers—						
Causes beyond their own control—						
Killed ... ..	...	...	1	...	...	...
Injured ... ..	13	32	87	...	...	...
Their own misconduct, or want of caution—						
Killed ... ..	3	3	5	...	...	...
Injured ... ..	33	49	51	10	19	23
Servants of the Department—						
Causes beyond their own control—						
Killed ... ..	1	...	...	...	...	...
Injured ... ..	10	14	17	11	14	22
Their own misconduct, or want of caution—						
Killed ... ..	8	8	24	...	...	1
Injured ... ..	107	154	174	518	714	1,055
Trespassers and others—						
Killed ... ..	24	17	14	2	1	2
Injured ... ..	23	38	26	50	70	71
Total { Killed ... ..	36	28	44	2	1	3
{ Injured ... ..	186	287	355	589	817	1,171

The returns are compiled on lines similar to those adopted by the Board of Trade in England, and all accidents which occur in the working of the railways, or on railway premises, to persons other than servants of the Department are reported, however slight the injuries may be. In the case of servants of the Department, only those accidents which prevent the servant injured from being employed for five hours on his ordinary work on any one of the three working days next after the accident are reported.

The amount of compensation paid during the twelve months ended 30th June, 1908, in connection with accidents on railways was £14,014, of which £8,795 was paid in respect of passengers, and £5,219 in regard to goods.

## PRIVATE RAILWAY LINES.

In New South Wales the established policy hitherto has been to keep the railways under State management and control, and at the present time there are only four private lines in operation, with the exception of short lines to connect coal-mines with the main railways, on a few of which provision has been made for the carriage of passengers and goods. In 1874 Parliament granted permission to a company to construct a line from Deniliquin, in the centre of the Riverina district, to Moama, on the Murray, where it meets the railway system of Victoria. A considerable proportion of the wool and other produce of Riverina reaches the Melbourne market by this route. The line, which was opened in the year 1876, is 45 miles in length. During the year 1888 a line, 35 miles 48 chains in length, was laid down from the Barrier Silver-mines, Silvertown, and Broken Hill, to the South Australian border. The line since its opening has had large support. A short line connects Liverpool with the Warwick Farm Racecourse. The line of the Commonwealth Oil Corporation extends from Newnes, on the Western line, to the Wolgan Valley. The following table shows the operations of these lines during the year 1907 :—

Name.	Line.			Total Capital Expended.	Reserve Fund.	Debentures Outstanding.	Passengers Carried.	Goods Carried.	Live Stock Carried.	Train Miles Run.
	Length.		Gauge.							
	m.	ch.	ft. in.	£	£	£	No.	tons.	No.	No.
Deniliquin & Moama	45	0	5 3	162,672	14,009	23,500	14,847	20,191	416,368	39,617
Silvertown ...	35	48	3 6	395,512	70,400	...	61,383	937,679	25,730	181,808
Warwick Farm ...	0	60	4 8½	5,700	...	...	17,565	...	370	37
Commonwealth Oil Corporation.	32	8	4 8½	149,780	...	...	..	...	...	...

The Deniliquin and Moama Company possesses 4 locomotives, 6 passenger carriages, and 53 goods carriages and vans ; and the Silvertown Company has 16 locomotives, 17 passenger carriages, and 650 goods vehicles. On the Warwick Farm line Government rolling-stock is used. The Commonwealth Oil Corporation has 4 locomotives and 2 carriages, but otherwise Government rolling-stock is used.

In addition to the lines shown in the above table, there are several branches, connected principally with coal mines ; a summary of them is given below :—

District.				Length.		Gauge.	
				m.	ch.	ft.	in.
52 lines connected with Northern Line	...	...	...	117	54	4	8½
12 " " " Western " "	...	...	...	6	50	4	8½
1 " " " Southern " "	...	...	...	4	0	4	8½
1 " " " South Coast " "	...	...	...	3	40	3	6
14 " " " South Coast " "	...	...	...	36	36	4	8½

## TRAMWAYS.

The tramways, as well as the railways, are the property of the State Government, and are under the control of the Railway Commissioners. There were, in June, 1908, eight distinct systems of tramways in operation, comprising the City and Suburban electric lines, measuring 77 miles 78 chains ; the North Shore electric lines, 11 miles 68 chains ; the Ashfield to Mortlake and Cabarita steam tramway, 8 miles 36 chains ; Kogarah to Sans Souci steam tramway, 4 miles 71 chains ; the Newcastle to Plattsburg tramway (including Plattsburg, Tighe's Hill, Mayfield, Merewether, and Adamstown sections), 17 miles 11 chains ; the Broken Hill steam tramway, 6 miles 56 chains ; Parramatta to Baulkham Hills steam tramway, 4 miles 37 chains ; and the

Manly steam tramway, 1 mile 23 chains; giving a total of 132 miles 60 chains of line in use.

The electric system was introduced into the city at the close of 1899, but for some years it had been in operation at North Sydney, where a trunk line runs from Milson's Point to Mosman, with branches to Gore Hill, Willoughby, Neutral Bay, and to the waters of Middle Harbour at The Spit. On the 8th December, 1899, the George-street-Harris-street electric tramway was opened to traffic. This line extends from the Circular Quay, along George-street to the Central Railway Station, and thence to the populous district of Pyrmont; it is a double track, and measures in length 3 miles 20 chains. The construction of single lines along Pitt-street and Castle-reagh-street has been carried out with the object of relieving George-street of a portion of the traffic between the Circular Quay and Central Railway Station. The conversion of the whole of the steam tramways in the metropolitan district into an electrical system has now been completed with the exception of the Ashfield to Mortlake and Cabarita line, and provision for the electrical power required has been made at the works at Ultimo.

The following table gives some interesting particulars respecting the metropolitan tramways, excluding those on the North Shore and the Ashfield to Mortlake and Cabarita line. In the year 1879, the tramways were open for only three and a half months, and for part of that time were worked by horse-power. The accounts since 1887 have been made up to the 30th June in each year :—

Year.	Length of Line.	Total Earnings.	Working Expenses.	Proportion of working cost to gross earnings.	Net Earnings.	Capital spent on Lines open.	Interest on Capital.
	miles.	£	£	d.	£	£	per cent
1879	1½	4,416	2,278	51·59	2,138	22,269	33·00
1880	4	18,980	13,444	70·83	5,536	60,218	12·34
1885	27½	223,340	207,995	93·13	15,345	708,109	2·17
1890	30½	249,508	207,517	83·17	41,991	790,555	5·31
1895	40½	230,583	186,081	80·70	44,502	962,037	4·62
1900	43½	315,930	268,504	84·99	47,426	1,338,006	4·06
1901	48½	438,668	366,018	83·44	72,650	1,535,958	4·77
1902	58	495,538	429,093	86·59	66,445	2,059,515	3·34
1903	66½	593,306	511,878	86·28	81,428	2,442,791	3·37
1904	66½	633,477	521,896	82·39	111,581	2,507,540	4·45
1905	73½	697,971	583,360	83·58	114,611	2,931,583	3·91
1906	73½	730,508	552,723	75·66	177,785	2,966,704	5·99
1907	75½	777,140	607,381	78·16	169,759	2,968,560	5·72
1908	78	865,632	687,843	79·46	177,789	2,988,931	5·96

The undermentioned figures show the expansion of the tram mileage in the metropolis, and the earnings and working cost per tram mile up to the 30th June, 1908.

Year.	Tram Mileage.	Earnings per Tram Mile.	Working cost per Tram Mile.
		d.	d.
1879	13,270	79·87	41·19
1880	84,074	54·18	38·38
1885	1,220,500	43·91	40·90
1890	1,474,646	40·60	36·46
1895	1,740,235	31·80	25·66
1900	3,106,185	24·41	20·75
1905	14,413,273	11·62	9·71
1906	14,246,845	12·31	9·31
1907	14,516,536	12·85	10·04
1908	15,329,695	13·55	10·77

The tramways have for seventeen out of the last nineteen years yielded more than the cost of working and interest. It must, however, be remembered that the State does not set apart any portion of the earnings for renewals, which may hereafter prove a considerable item, as a large part of the rolling-stock is new.

The fares paid on the tramways included in the previous table average about 0·55d. per mile, the lines being divided into penny sections of about  $1\frac{1}{2}$  mile. For the whole of the tramways in the Metropolitan area the average length of the sections is about  $1\frac{1}{2}$  mile, and the fare per mile 0·635d. The number of persons using the tram-cars could not be ascertained with any exactness until quite recently, as the tickets collected for separate sections gave only a partial indication of the number travelling. The introduction of a system of through cash fares on all lines has, however, made such a calculation possible. During the year 1907-8 no less than 148,729,916 passengers travelled on the tramways in the metropolitan area.

The following statement shows the working of the various tramways in sections for the year ended 30th June, 1908. Although five sections experienced a loss during the period, the total net revenue on all lines, amounting to £68,425, returns a profit of 1·83 per cent. after allowing for interest on capital invested:—

Line.	Total cost of Construction and Equipment.	Passengers Carried.	Gross Revenue.	Working Expenses.	Interest on Capital Invested.	+ Profit. — Loss.
	£	No.	£	£	£	£
City and Suburban—Electric .. ..	2,088,931	148,729,916	865,632	687,843	107,360	+70,429
North Shore—Electric .. ..	299,549	10,992,974	59,592	47,569	10,940	+1,053
Ashfield to Mortlake and Cabarita—Steam .. ..	55,173	1,228,038	7,378	10,522	2,004	—5,148
Kogarah and Sans Souci—Steam .. ..	22,457	363,895	3,325	3,289	820	—784
Manly—Steam .. ..	17,849	318,418	1,327	1,738	652	—1,063
Parramatta to Baulkhan Hills—Steam .. ..	39,158	375,014	3,025	2,029	1,101	—705
Newcastle Suburban—Steam .. ..	248,340	7,438,786	52,789	39,003	9,069	+4,717
Broken Hill—Steam .. ..	70,534	2,573,891	15,926	16,442	2,558	—74
Total, all lines .. ..	3,732,991	172,020,932	1,011,994	809,065	134,504	+68,425

In the following table are given details of revenue and expenditure, and capital invested for all State tramways, since their inception in 1879. The net earnings of the tramways for the last quinquennial period amounted to 4·55 per cent. on cost of construction and equipment, which compares favourably with 3·67 per cent., the actual interest on the public debt, taking into consideration the actual sum obtained by the State for its loans, many of which were floated below par:—

Year.	Total Length of Lines.	Capital Expended on Lines open for Traffic.	Gross Revenue.	Working Expenses.	Net Earnings.
	Miles.	£	£	£	£
1879	1 $\frac{1}{2}$	22,061	4,416	2,278	2,138
1880	4 $\frac{1}{2}$	60,218	18,980	13,444	5,536
1885	35	748,506	227,144	207,898	19,246
1890	39 $\frac{1}{2}$	933,614	268,962	224,073	44,889
1895	61	1,428,518	282,316	230,993	51,323
1900	71 $\frac{1}{2}$	1,924,720	409,724	341,127	68,597
1901	79 $\frac{1}{2}$	2,194,493	551,674	462,471	89,203
1902	104	2,829,363	631,757	541,984	89,773
1903	124 $\frac{1}{2}$	3,371,587	752,084	654,165	97,869
1904	125 $\frac{1}{2}$	3,471,759	802,985	678,625	129,360
1905	125 $\frac{1}{2}$	3,637,922	813,569	685,682	127,887
1906	126	3,669,096	851,483	665,083	186,400
1907	128 $\frac{1}{2}$	3,669,524	908,701	727,947	180,754
1908	132 $\frac{1}{2}$	3,732,991	1,011,994	809,065	202,929

The tramway rolling-stock, on the 30th June, 1908, consisted of 35 motors, 76 steam cars, 693 motors and 45 trail cars for electric lines, and 47 service vehicles, making a total of 896. The tram mileage during the year was 17,521,410, being an increase of 900,976 miles on that of the preceding year.

## TRAMWAY ACCIDENTS.

Investigation shows that the method of recording accidents on tramways can be viewed as satisfactory only during the last five years.

The accidents which occurred on the Government tramways during the last five years have been classified in the subjoined table, and have been tabulated on similar lines to those relating to the railways :—

Classification.	Accidents connected with the Movement of Tramway Vehicles.					Accidents not connected with the Movement of Tramway Vehicles.				
	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.
Passengers—										
Causes beyond their own control—										
Killed .. .. .	1	..	..	1	..	..	..	..	..	..
Injured .. .. .	24	37	41	50	97	..	..	..	3	1
Their own misconduct, or want of caution—										
Killed .. .. .	4	5	9	5	8	..	..	..	..	..
Injured .. .. .	100	97	106	186	227	1	2	6	2	7
Servants of the Department—										
Causes beyond their own control—										
Killed .. .. .	..	..	..	1	2	..	..	..	..	..
Injured .. .. .	7	6	4	10	9	2	..	3	10	8
Their own misconduct or want of caution—										
Killed .. .. .	1	2	1	1	1	..	1	..	1	..
Injured .. .. .	115	108	109	120	135	163	160	124	153	246
Others—										
Killed .. .. .	11	5	8	7	15	..	..	..	..	..
Injured .. .. .	96	85	120	155	179	1	1	3	6	11
Total { Killed ..	17	12	18	15	26	..	1	..	1	..
Injured ..	342	333	380	521	647	167	163	136	174	273

The number of passengers carried on the tramways during the year ended 30th June, 1908, was 172,020,932, which would give the rate of fatal accidents to passengers as 0·047 per million. All these accidents were due entirely to misconduct or want of caution on the part of passengers. As the tramways for a great part of their course traverse crowded streets, the number of fatal and non-fatal accidents must be considered very small.

The amount of compensation paid during the twelve months ended 30th June, 1908, in respect of accidents on the tramways was £13,091. as compared with £9,043 for the preceding year.

## EMPLOYMENT AND WAGES.

The account of wages paid, together with the staff employed on the railways and tramways during the financial years 1907-8, is shown in the following statement, in comparison with the previous year:—

Particulars.	Year ended 30th June, 1908.			Year ended 30th June, 1907.		
	Railways.	Tramways.	Total.	Railways.	Tramways.	Total.
	No.	No.	No.	No.	No.	No.
Persons employed—						
Salaried staff ...	1,985	234	2,219	1,770	217	1,987
Wages „ ...	15,939	4,813	20,752	13,411	4,117	17,528
Total ...	17,924	5,047	22,971	15,181	4,334	19,515
Wages paid—	£	£	£	£	£	£
Maintenance Branch	577,800	88,772	666,572	444,998	73,161	518,159
Locomotive „	825,418	.....	825,418	744,658	.....	744,658
Electric „	.....	150,162	150,162	.....	126,187	126,187
Traffic „	397,426	296,079	693,505	374,160	277,154	651,314
Total ...	1,800,644	535,013	2,335,657	1,563,816	476,502	2,040,318

The total staff employed during 1907-8 exceeded that of the previous years by 3,456, and the amount of wages paid increased by £295,339. The receipts per employee on the wages staff—railways and tramways—averaged £112 11s. for the twelve months.

## PRIVATE TRAMWAYS.

There are three tramways under private control within the State. One of these branches from the Illawarra line at Rockdale, in the Metropolitan area, and runs to Brighton-le-Sands, a distance of 1 mile. The line was constructed in 1885, and the original motive power was steam, subsequently converted into electric. The line is chiefly used by excursionists visiting the shores of Botany Bay. The remaining two are steam tramways; one passes through the township of Parramatta, commencing at the Park gates and continuing as far as the Newington Wharf at Duck River, a distance of 3 miles, where it connects with the Parramatta River steamers conveying passengers and goods to and from Sydney. The line was opened in 1883. The second steam line is that from Fassifern to Toronto, on Lake Macquarie, a distance of 2½ miles, which was opened in 1891.

## POSTS AND TELEGRAPHS.

UNDER the provisions of clause 51 of the Commonwealth of Australia Constitution Act, the control of the Post and Telegraph services became vested in the Commonwealth, and by proclamation these services were taken over on the 1st March, 1901. The system of administration and the rates levied in each State at the date of the union were, however, continued in force until the Commonwealth Postal Act was brought into operation on the 1st November, 1902, this measure securing uniformity in all the States. Although the Post Office is now exclusively controlled by the Commonwealth, it is apparent that in any statistical account of New South Wales special reference should be made to a service which is intimately associated with the commercial and social life of the State.

Taking into consideration the large area of the State, New South Wales possesses an excellent system of postal and telegraphic communication. The interstate system is fairly perfect, and New South Wales is in direct communication with Europe and the rest of the world by means of the cables connecting with the various Asiatic, continental, and the Canadian and South African telegraph lines. The State is also connected with New Zealand by a submarine cable.

The history of the Postal Department is most interesting, since it affords a striking illustration of small beginnings leading to great results. No means of postal communication existed in New South Wales until 1810, when the first post office was established in Sydney. This establishment appears to have been merely a distributing office for letters and parcels arriving in Sydney; the conveyance of inland mails depended on constables and private individuals, no arrangements having been made for the despatch of ship letters. The postmaster was empowered to charge on delivery to the addressee 8d. for every English or foreign letter of whatever weight, and for every parcel weighing not more than 20 lb., 1s. 6d., and exceeding that weight 3s. The charge on colonial letters was 4d., irrespective of weight; and soldiers' letters were charged 1d. No measures towards additional postal communication were taken till 1825, when an Act was passed to regulate the postage, and a proclamation was issued fixing the postage rates and salaries of postmasters, and inviting tenders for the conveyance of mails. The provisions of the Act, however, were not observed until 1828. In that year there were in the Sydney establishment one principal postmaster, one clerk, and one letter-carrier, in addition to eight country postmasters and a carrier at Parramatta. In 1837 a fortnightly mail was established between Sydney and Melbourne, which was then a part of New South Wales. Stamps were introduced in the same year in the form of stamped covers or envelopes, which are believed to have been the first postage stamps ever issued.

In the year 1838 there were fifteen officers in the Sydney establishment. Within the borders of New South Wales, which at that time included Victoria and Queensland, there were forty post offices, and the revenue of the Department for the year was £3,390, and the expenditure £10,357. The New South Wales Government also made payments to the post office at Kororaraka, in New Zealand, which was not created a separate colony until 1841. Mail communication between Sydney and Adelaide was established

in 1847, and the rate of postage on a single letter was fixed at 1s. 6d. An amendment of the Postal Act was made in 1849, when the postage on town letters was fixed at 1d., and on inland letters at 2d., while the postage on ship letters was 3d., in addition to the inland rate, and authority was given for the use of postage stamps in their present form.

The first annual report of the Department was laid before Parliament in the year 1855, and at that time there were 155 post offices in the State. The head office was in George-street, occupying the same site as the present edifice, but the building was small and inconvenient. There were no electric telegraphs in the State, and the Observatory, by means of flags and semaphores, signalled the arrival of vessels at the Heads. Prior to the opening of the first railway, in September, 1855, the Southern and Western mails were despatched from the General Post Office in old-fashioned mail-coaches every evening. During that year the total distance travelled by the postal contractors, by coach and on horseback, was 1,023,255 miles. The number of letters passing through the post office was 2,114,179, of which 617,041 were addressed to places beyond the State. The number of newspapers was 2,100,989, of which 1,281,613 were inland, and 819,376 were "foreign." Book parcels and packets were not reckoned separately, but were counted as letters. The revenue of the Department for the year was £24,902, and the expenditure was £60,221. The staff numbered 223 officers, of whom fifty-six were connected with the office in Sydney. The annual report also indicates that communication with Victoria was effected three times a week.

In the year 1856 the first iron pillar letter-receivers were erected in Sydney, and 22 miles of railway were utilised for postal purposes, 16½ miles being added in the following year.

In 1863 it was resolved to build a new General Post Office at Sydney, and the construction of the present building was commenced. It was not opened till 1874. The headquarters of the Electric Telegraph Department, the Central Telephone Exchange and the Money Order and Postal Note Office are in the same building.

In 1855 there were only 155 post offices within the area now comprised in New South Wales and Queensland; at the close of 1907 there were within this State alone 1,809 post offices, besides 510 receiving offices—a truly marvellous development. The number of miles travelled by the mail in the former year was 1,023,255, while the distance covered in 1907 aggregated 21,001,885 miles, including ocean mails. The number of letters passing through the Post Office during the same period had increased nearly 58 times, and the number of newspapers over 23 times. Packets and book parcels were first enumerated separately in 1858, during which year 68,564 passed through the post, while in 1907 the number was 35,816,853. Post-cards were first introduced in 1875, when the number sent was 128,786; in 1907, however, no less than 15,097,710 passed through the Post Office, of which 10,118,916 were posted within the State.

Double cards, which are designated letter-cards and closed against inspection, were introduced for public use on the 1st July, 1894. These cards may be transmitted within the Commonwealth, as well as to New Zealand, Fiji, and Papua.

A parcels post for inland and interstate transmission, was inaugurated on the 1st October, 1893, the maximum weight being fixed at 3 lb. and 11 lb., according to mode of conveyance. The number of parcels carried under this system up to the close of the year was 44,265, while during 1894 349,218 were carried. Under the foreign system, which has

been in force since August, 1886, 19,437 parcels were carried in 1893, and in the following year 18,672. In 1907 the total number of parcels carried was 1,374,701 of which 1,101,941 were inland, 192,260 interstate, and 80,500 foreign.

The table given below shows the number of post offices, employees, and income and expenditure in five-year periods from 1855 to 1907. For 1885 and succeeding years the number of persons employed and the income and expenditure refer to the Department as a whole; prior to that year the figures refer to Post Office only. Also, from 1885, the income is exclusive of interest on Savings Bank investments, and interest due on uninvested Savings Bank balances in the Treasury; and the expenditure is exclusive of interest allowed to Savings Bank depositors:—

Year.	Post Offices.	Receiving Offices.	Persons employed in the Department.	Income.	Approximate Expenditure.
	No.	No.	No.	£	£
1855	155	8	223	24,902	60,221
1860	289	*	289	45,613	71,391
1865	435	*	513	70,985	83,659
1870	562	*	690	84,411	86,722
1875	752	7	967	107,761	196,368
1880	927	119	1,536	194,084	268,128
1885	1,115	202	3,205	485,489	573,617
1890	1,338	325	3,821	637,975	677,216
1895	1,470	502	5,063	648,852	763,259
1900	1,668	521	5,516	831,340	764,227
1905	1,744	522	5,890	1,022,330	970,808
1906	1,769	519	5,943	1,134,248	966,498
1907	1,809	510	†6,964	1,237,389	1,067,232

\* Not recorded. † Including temporary employees.

Exclusive of 1,072 mail contractors, 6,964 persons were employed by the Department in 1907.

The revenue of the Department for 1907 included the following amounts:—Postage, £809,697; electric telegraphs, £208,710; telephones, £154,151; money order commission, £20,794; poundage on postal notes, £17,615; other receipts, £26,422. The expenditure for the year comprised:—Salaries, £506,448; contingences, £171,655; conveyance of mails, £252,682; cable subsidies, &c., £11,427; telegraph and telephone works, £99,134; other expenditure, £25,886.

In the expenditure shown in the table, interest on the outlay on post office buildings and telegraph lines, and maintenance of buildings, is not taken into account. If allowances be made for these, a deficiency in the finances of the Department would be disclosed.

Until 1897, the Postal Department was carried on at a considerable annual loss to the State. This was due in a measure to the wide area over which the population of the country is scattered, with consequent large expenditure for the carriage of mails, also to the fact that newspapers, which form a large proportion of the mail matter, were then carried free. But it has always been held that the safe and regular despatch and delivery of the mails is an item of too much importance in the political, commercial, and social life of the State to be neglected, even though it should entail a heavy charge upon the general revenue, or even if it should be conducted at a slight loss.

The extent of postal lines, the distance travelled, and cost of conveyance of mails, is shown below:—

Year.	Extent of Postal Lines.	Distance actually travelled.	Cost of conveyance of Mails, Foreign and Inland.
	miles.	miles.	£
1855	*	1,023,255	45,412
1860	8,231	1,461,518	44,303
1865	11,992	2,521,212	49,840
1870	14,242	3,062,458	48,649
1875	17,671	3,787,757	138,912
1880	22,427	5,246,373	174,238
1885	26,683	6,621,996	226,105
1890	29,594	7,463,000	231,467
1895	33,693	9,338,000	210,354
1900	36,294	11,925,600	213,924
1905	36,480	11,989,968	261,424
1906	40,178	12,112,219	258,306
1907	+205,610	+21,001,885	252,682

\* Not recorded. † Including ocean mails.

The following return will give an idea of the magnitude of the work done by the Post Office of New South Wales:—

Year.	Letters.	Post-cards.	Newspapers.	Packets and Book Parcels.	Parcels.
	No.	No.	No.	No.	No.
1855	2,114,179	.....	2,100,989	* .....	.....
1860	4,230,761	.....	3,668,783	83,736	.....
1865	6,328,353	.....	4,689,858	249,904	.....
1870	7,083,500	.....	3,814,700	157,700	.....
1875	13,717,900	128,786	6,262,600	357,000	.....
1880	21,732,500	153,560	13,791,000	711,600	.....
1885	39,351,200	341,000	25,567,400	3,446,800	.....
1890	63,017,700	677,400	40,597,200	8,939,600	21,300
1895	68,416,308	957,400	44,902,900	11,259,200	422,800
1900	78,129,284	1,473,410	51,500,920	13,846,700	711,700
1905	103,576,306	8,382,282	44,599,104	22,083,000	994,100
1906	115,062,748	12,621,096	47,144,094	24,038,946	1,162,185
1907	122,130,948	15,097,710	48,340,646	35,816,853	1,374,701

\* Included with letters.

The progress exhibited by the table just given is astonishing. In 1855 the total number of letters and newspapers, inland and foreign, was only a shade over 2 millions each, whereas in 1907 the number of letters and post-cards had grown to over 137 millions, and newspapers to over 48 millions, without reckoning nearly 36 million packets and book parcels which in the first year mentioned, were included with the letters. The enormous increase in the number of post-cards carried during the last few years is, of course, mainly due to the introduction of the pictorial post-card.

The charge on letters between the Commonwealth States and the United Kingdom, which had for a long period been at the rate of 6d. per half-ounce *via* Italy, and 4d. by the long sea route, was reduced in 1891 to 2½d., and a further reduction was made in 1905 to 2d. for a letter sent to the United Kingdom, whilst a letter from the United Kingdom can be posted to the States of the Commonwealth for 1d. By an arrangement made at the Postal Congress held in Vienna in 1891, New South Wales, as

well as the other States of Australasia, entered the Universal Postal Union on the 1st October, 1891. The effect has been the extension of the reduced rate to all countries embraced in the Union.

In the year 1907, 4,380,432 letters and post-cards, 2,256,956 newspapers, and 1,208,418 packets and parcels, were posted in New South Wales for countries outside Australia.

By an enactment made in June, 1893, it is required that newspapers be registered at the General Post Office, and both newspapers and supplements must be printed in New South Wales, from type set up therein, in order to entitle them to transmission as newspapers. This provision is continued under the Post and Telegraph Act, 1901, passed by the Commonwealth Legislature.

Newspapers are transmitted to any place within the Commonwealth, Papua, New Zealand, and Fiji, at the rate of  $\frac{1}{2}$ d. for every 10 oz. or fraction thereof, and to all other places at the rate of 1d. for each newspaper not exceeding 4 oz. in weight, with  $\frac{1}{2}$ d. for every additional 2 oz. or fraction thereof.

The following table shows the number of registered letters during the last ten years in the State:—

Year.	Number.	Year.	Number.
1898 ... ..	1,054,045	1903 ... ..	928,521
1899 ... ..	1,038,768	1904 ... ..	901,235
1900 ... ..	1,023,974	1905 ... ..	964,294
1901 ... ..	1,213,277	1906 ... ..	925,726
1902 ... ..	1,095,095	1907 ... ..	889,407

Of the registered letters in 1907, there were 198,038 from and to places beyond the State, and 691,369 inland.

Regular steam communication with England was first established in 1852. The steamers were withdrawn two years later on the outbreak of the Crimean War, but in 1856 they were again started, and the service was carried on by the Peninsular and Oriental and the Royal Mail Companies.

As this service failed to give satisfaction to the public, a line was started in 1866 to carry mails from Sydney, *via* Panama, but it was terminated two years later by the failure of the company. On the completion of the railway across America in 1869, a monthly service, *via* San Francisco, was inaugurated, and was subsidised by the Governments of New South Wales and New Zealand. This line ceased running in 1907, and, after an interval of some months, another monthly service was started by a British firm.

A service was established between Sydney and Vancouver in 1893, and is subsidised by the New South Wales Government.

Since the establishment of a mail route, *via* America, there has been a great improvement in the service *via* Suez. The Peninsular and Oriental Company continues to carry mails from the Australian States, and the Orient Pacific Company commenced in 1878. More recently French and German steamers have entered the service between Europe and Australia.

Contracts with the Peninsular and Oriental and the Orient Pacific companies for a weekly service, subsidised by the Imperial and Australian Governments, expired in 1905, and since that date mails carried by the former company from Australia are paid for at poundage rates. The Federal Government concluded another agreement with the Orient Company which has been extended to 1910. A contract with Sir Jas. Laing and Sons (Ltd.), for the conveyance of Australian mails in 1905 lapsed, and a new agreement was made with the Orient Pacific Company which will commence in 1910.

The progress made in regard to the means of postal communication with the United Kingdom and the continents of Europe and America is

marvellous. Instead of the unsatisfactory ocean mail service of 1857, which nominally brought monthly mails, with news 58 days old, there are now four great lines of ocean steamships, which bring mails *via* the Suez Canal at least once a week, the time occupied in the conveyance of the mails averaging 33 days. In addition, there is a monthly service *via* Vancouver, by which mails are sent from Sydney to London in 38 days, and a line of steamers despatched every month carry mails *via* San Francisco. There was also a steam service with London *via* Torres Straits, and advantage was at one time taken of these vessels to send mail matter. This route, however, was but little used by New South Wales. The following table shows, as far as possible, the average time and quickest time occupied in the transmission of letters by various routes between London and Sydney during 1907:—

Service.	London to Sydney.		Sydney to London.	
	Average Time.	Quickest Time.	Average Time.	Quickest Time.
	days.	days.	days.	days.
Per Peninsular and Oriental S. N. Co., <i>via</i> Colombo and Brindisi ... ..	31 $\frac{1}{2}$	31	31 $\frac{3}{4}$	31
„ Orient-Pacific S. N. Co., <i>via</i> Suez and Naples...	33 $\frac{1}{2}$	32	33 $\frac{3}{4}$	33
„ Canadian-Australian, <i>via</i> Vancouver ... ..	37 $\frac{1}{2}$	37	38 $\frac{1}{2}$	34
„ Messageries Maritimes, <i>via</i> Marseilles ... ..	...	...	34 $\frac{1}{2}$	34
„ Nord-Deutscher Lloyd, <i>via</i> Genoa ... ..	...	...	34 $\frac{1}{2}$	32

There are regular mail services, subsidised by the New South Wales Government, to New Guinea, New Hebrides, and other Pacific islands.

#### TELEGRAPHS.

The electric telegraph was first used by the public of New South Wales on the 26th January, 1858, when the line from Sydney to Liverpool, 22 miles in length, was brought into operation. From this small beginning the system has increased until in 1907 there were 1,278 stations, and 15,910 miles of lines open, carrying 82,249 miles of wire in actual use. The following table gives a view of the business of the Telegraph Branch of the Post Office from 1865 to 1907:—

Year.	Telegraph Stations.	Telegrams transmitted, delivered, and in transit.	Actual Revenue received.	Lines.	Wires.	Cost of construction, including Telephone installation.
	No.	No.	£	miles.	miles.	£
1865	55	*138,785	29,769	.....	2,989	145,446
1870	86	*173,812	28,550	.....	5,247	195,545
1875	137	*719,745	48,657	.....	8,012	253,391
1880	289	1,319,537	84,110	.....	13,188	462,226
1885	404	2,625,992	155,073	.....	19,864	641,669
1890	628	4,101,449	193,707	11,231	23,598	743,698
1895	834	2,635,456	145,901	12,316	23,799	840,380
1900	961	3,219,907	174,895	14,065	41,494	1,132,626
1905	1,069	3,837,962	156,956	14,827	71,086	1,434,017
1906	1,122	4,452,506	191,665	15,417	74,754	1,469,429
1907	1,278	4,894,283	207,525	15,910	82,249	†922,119

\* Number despatched only.

† Exclusive of cost of telephone construction.

The number of telegrams received and despatched during the year, inland telegrams being counted once only, amounted to 4,548,256, or 2·93 per head of population.

## TELEGRAPH RATES.

The rates for the transmission of telegrams within New South Wales and to the other States of the Commonwealth were determined by the Post and Telegraph Rates Act, 1902, and came into force on the 1st November, 1902. For ordinary telegrams not exceeding sixteen words, including the address and signature, the charges are 6d. in town and suburban districts within prescribed limits or within 15 miles of the sending station; 9d. to other places within the State; and 1s. for messages sent to any other State of the Commonwealth; in each case an extra charge of 1d. is made for each additional word. Double rates are imposed for the transmission of telegrams on Sunday, Christmas Day, and Good Friday, and between the hours of 8 p.m. and 9 a.m., and for urgent telegrams.

## CABLE SERVICES.

Cable communication with Europe was opened in 1872 by means of a submarine cable from Singapore to Port Darwin, whence messages were transmitted by the overland telegraph to Port Augusta in South Australia. In 1879 the company controlling the cable duplicated the line, and was paid an annual subsidy by New South Wales, Victoria, South Australia, Western Australia, and Tasmania. In 1891 the Government of New South Wales, in conjunction with other Australian Governments, undertook to pay the company an annual amount equal to half the loss it might sustain by a reduction in the schedule of cable charges. In the following year the contracting Governments agreed to contribute towards the amount required to bring the South Australian revenue, on international telegrams, up to £37,552.

A cable, laid in 1876, connecting New Zealand with New South Wales was subsidised for ten years after its opening.

In 1893 a cable from New Caledonia to Queensland was opened by a French company, to whom New South Wales and Queensland agreed to pay an annual subsidy for thirty years.

In 1899 it was decided by the Governments of the United Kingdom, Canada, and Australasia to construct a Pacific cable touching only British territory on its way from Australia to America. This line, which was completed in 1902, connects Southport, in Queensland, with Vancouver *via* Norfolk Island, Fiji, and Fanning Island. There is also a branch from Norfolk Island to New Zealand.

The direct Cape cable, from Durban to Fremantle, which provides an alternative all-British route to that of the Pacific, was completed in 1901.

The contributions which New South Wales was called upon to pay to cable companies during the year 1907, were—Queensland-New Caledonian Guarantee, £2,000; Pacific Cable, £9,427; total £11,427. The other guarantees and subsidies have now lapsed.

The following table shows the amount of outward business transacted by New South Wales, with Europe and the East, during the last ten years:—

Year.			Cable Messages sent from New South Wales.	Amount received.	Year.			Cable Messages sent from New South Wales.	Amount received.
			No.	£				No.	£
1898	...	...	22,762	67,055	1903	...	...	78,795	78,197
1899	...	...	31,720	83,365	1904	...	...	76,713	78,406
1900	...	...	35,740	97,888	1905	...	...	82,519	89,254
1901	...	...	43,005	90,716	1906	...	...	96,478	101,302
1902	...	...	79,805	84,368	1907	...	...	106,830	106,502

The number of messages sent in 1907 was nearly five times the number in 1898, and the revenue shows an increase of 58 per cent.

Tenders were invited during 1907 for the installation of wireless telegraphy at various stations on the Australian coast.

#### TELEPHONES.

Telephone exchanges have been established in Sydney and other important centres of population. A long-distance service between Sydney and Newcastle was inaugurated in 1898, and since that year several other towns have been connected with the metropolis. A telephone from Sydney to Melbourne was opened in 1907.

Since 1896 a reduction in the charges has resulted in a considerable increase in the number of subscribers. The following table shows the growth of the service during the last ten years:—

Year.	Exchanges	Connections.			Cost of construction (including expenditure on tunnels).	Rental received.
		Sydney and Suburbs.	Country.	Total.		
	No.	No.	No.	No.	£	£
1898	33	5,750	647	6,397	45,286	50,708
1899	38	6,694	862	7,556	55,555	60,429
1900	45	7,502	1,253	8,755	69,687	70,877
1901	48	8,398	1,466	9,864	44,051	81,852
1902	51	9,401	1,678	11,079	21,684	96,200
1903	57	10,193	1,898	12,091	19,687	105,002
1904	61	11,046	2,092	13,138	14,001	116,328
1905	64	11,909	2,315	14,224	18,988	127,514
1906	76	12,670	2,783	15,453	26,055	144,933
1907	96	14,634	4,355	18,989	86,139	154,151

There are also telephone stations in the country used in conjunction with the Telegraph service.

## SHIPPING.

From the year 1860—just after New South Wales was restricted to its present boundaries—up to the present time, the trade and shipping returns of the State show a remarkable expansion. The rate of increase in shipping has been much faster than that of the population, despite the checks occasioned by unfavourable seasons, and the low prices ruling for staple products in the European markets.

The following table shows the number and tonnage of vessels arriving in and departing from New South Wales, at intervals of five years since 1860, together with the average tonnage per vessel at each period :—

Year.	Entered.		Cleared.		Average Tonnage per Vessel.
	Vessels.	Tonnage.	Vessels.	Tonnage.	
1860	1,424	427,835	1,438	431,484	300
1865	1,912	635,888	2,120	690,294	329
1870	1,858	689,820	2,066	771,942	373
1875	2,376	1,109,086	2,294	1,059,101	464
1880	2,108	1,242,458	2,043	1,190,321	586
1885	2,601	2,088,307	2,583	2,044,770	797
1890	2,326	2,340,470	2,317	2,294,911	998
1895	2,390	2,851,546	2,405	2,854,705	1,190
1900	2,784	4,014,755	2,714	3,855,748	1,432
1905	2,725	4,697,511	2,694	4,684,108	1,731
1907	3,238	6,070,953	3,205	6,009,282	1,875

In the shipping records of New South Wales the total voyages of vessels are included, but no account is taken of ships of war, cable-laying vessels, and yachts, nor of vessels trading between ports in New South Wales. The tonnage quoted is net.

In 1860 the number of vessels required to conduct the trade of New South Wales was 1,424, while in 1907 the total had increased to 3,238. A more definite idea of the growth of trade is obtained, however, when it is stated that in 1860 the tonnage of the vessels that entered the ports of the State was 427,835 while in 1907 the tonnage was 6,070,953, or over fourteen times as large. During this period the size of vessels has been constantly increasing. In the first year the average capacity of each vessel was 300 tons. In 1907 the figure was 1,875 tons, and vessels over 10,000 tons now enter the port of Sydney frequently.

The tonnage fluctuated from year to year, but with a constant tendency to increase, until in 1907 it reached the highest figure on record. Compared with other Australian States the shipping tonnage of New South Wales greatly exceeds that of any other province, as it comprises considerably more than one-third of the total. Victoria comes next with a little over one-fifth.

The striking feature of the above table is the enormous expansion which has marked the years subsequent to the federation of the Australian States. In the interval—1900-07—the tonnage of the inward shipping increased 51 per cent., and of the outward 56 per cent.

#### NATIONALITY OF VESSELS.

The trade of the State is, to a very large extent, carried on under the British flag, the deep-sea trade with the mother country and British possessions being in the hands of the shipowners of the United Kingdom, and the coasting trade chiefly in local hands. Since 1881 there has been a notable increase in foreign shipping, and at the present day the greater portion of the direct trade transacted with foreign ports is carried in vessels which are not British. This has been due to the appearance in the Australian trade of the steamers of the Messageries Maritimes in 1883, of those of the two German lines some time later, and more recently the vessels of the American and Japanese Companies. From the table given below, showing the expansion in British and foreign shipping during the last forty-seven years, it will be seen that the British tonnage entered and cleared in 1860 was 689,251, or 80·2 per cent. of the total of 859,319 tons; while in 1880 the proportion was as high as 92·9, British vessels representing 2,259,924 tons out of a total of 2,432,779. In 1907, however, the British shipping had fallen to 82·8 per cent., the foreign tonnage having increased from 172,855 to 2,079,216 during the twenty-seven years which have elapsed since 1880:—

Year.	British.		Foreign.		Total.
	tons.	per cent.	tons.	per cent.	tons.
1860	689,251	80·21	170,068	19·79	859,319
1865	1,248,249	94·12	77,933	5·88	1,326,182
1870	1,333,410	91·22	128,352	8·78	1,461,762
1875	2,001,641	92·32	166,546	7·68	2,168,187
1880	2,259,924	92·89	172,855	7·11	2,432,779
1885	3,615,582	87·48	517,495	12·52	4,133,077
1890	4,030,472	86·95	604,909	13·05	4,635,381
1895	5,061,387	88·70	644,864	11·30	5,706,251
1900	6,702,106	85·15	1,168,397	14·85	7,870,503
1905	8,033,943	85·63	1,347,676	14·37	9,381,619
1907	10,001,019	82·79	2,079,216	17·21	12,080,235

Of the tonnage set down as British, the larger portion is owned or registered in Australia and New Zealand. Prior to 1891 the returns did not discriminate between Australasian shipping and that belonging to other British colonies,

and it is only after 1900 that Australian vessels can be separated from New Zealand; but in 1870, out of 1,333,410 tons of shipping entered and cleared under the British flag, 964,718 tons, or 72·3 per cent., belonged to British possessions, the great bulk being Australasian; in 1880, out of 2,259,924 tons of British shipping entered and cleared, 1,499,236 tons, or 66·3 per cent., belonged to British colonies; in 1900 the shipping from and to British possessions amounted to 6,702,106 tons (of which 3,590,284 tons, or 53·6 per cent., were Australasian) out of a total of 7,870,503 tons; while in 1907 out of a total of 12,080,235 tons, 4,251,953, or 35·2 per cent., were Australian.

The tonnage of the foreign vessels trading with New South Wales is still small, although a great advance has been made during the last fifteen years. Taking the year 1907, for which the total tonnage of the principal nationalities is given below, Germany stands first, then Scandinavia, then France. The only other nations whose carrying trade with the State is important are the United States, Japan, and Italy.

The statement below shows the total shipping of the principal nationalities that entered and cleared the ports of New South Wales in 1890, 1900, and 1907, as well as the proportions per cent. In 1890 and 1900 New Zealand vessels are included with the Australian, and cannot be separated:—

Nationality.	Total Shipping Entered and Cleared New South Wales.						Percentage of each Nationality.		
	1890.		1900.		1907.		1890.	1900.	1907.
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.			
Australian ..	3,223	2,453,300	3,305	3,590,284	3,034	4,251,953	52·93	45·62	35·20
New Zealand ..					575	771,434			6·39
British ..	965	1,577,172	1,460	3,111,822	1,789	4,977,632	34·02	39·54	41·20
French ..	76	137,466	159	249,302	173	339,227	2·97	3·17	2·81
German ..	152	229,413	144	351,064	348	865,183	4·95	4·46	7·16
Scandinavian ..	29	22,027	111	108,749	250	371,483	·47	1·38	3·08
Italian ..	4	4,780	54	71,903	78	109,902	·10	·91	0·91
Japanese ..	.....	.....	48	120,208	53	159,174	.....	1·53	1·32
American ..	161	173,770	165	193,849	101	164,559	3·75	2·46	1·36
Other Nationalities ..	33	37,453	43	73,322	42	69,688	·81	·93	0·57
Total..	4,643	4,635,381	5,498	7,870,503	6,443	12,080,235	100·00	100·00	100·00

#### TRADE WITH VARIOUS COUNTRIES.

Of the tonnage engaged during 1907 in the outward trade of New South Wales, 15·2 per cent. went to the United Kingdom. The tonnage of vessels to Victoria and the other Australasian provinces, including New Zealand, amounted to 48·6 per cent. of the whole. As regards the remainder, 6·6 per cent. went to other British possessions, and 29·6 per cent. to foreign countries. The following table shows the tonnage entered from and cleared for the United Kingdom, the British colonies, and some of the principal foreign countries, but it must be borne in mind that the figures represent the nominal tonnage or cargo space of the vessels carrying the goods, and not the actual weight of the goods carried, which latter information it is impossible to obtain.

A distribution of the traffic among the leading divisions of the British Empire and the principal foreign countries with which the State of New South Wales has commercial relations will be found below :—

Country.	Entered from and cleared for various Countries.					
	1890.		1900.		1907.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
British Empire—						
Australian States ... ..	2,974	2,544,905	3,082	3,861,154	3,248	5,177,848
United Kingdom ... ..	318	651,133	341	954,232	449	1,638,480
New Zealand ... ..	460	332,793	540	598,710	628	977,005
India and Ceylon ... ..	33	61,820	57	138,993	60	172,732
Hongkong ... ..	64	92,523	68	121,933	42	101,637
Canada ... ..	4	5,103	41	76,477	48	113,187
Cape Colony ... ..	12	18,744	152	240,755	43	88,898
Natal ... ..	...	.....	40	60,701	17	32,714
Fiji ... ..	66	68,003	65	64,125	94	119,129
Straits Settlements ... ..	24	33,994	19	31,212	58	113,033
Other British Possessions ... ..	13	9,079	60	58,101	35	38,267
Total, British ... ..	3,968	3,818,097	4,465	6,206,393	4,722	8,572,930
Foreign Countries—						
France ... ..	25	57,096	44	100,793	49	144,643
Germany ... ..	69	133,368	70	234,617	127	423,672
Netherlands ... ..	4	4,622	3	5,062	3	5,457
Belgium ... ..	10	14,426	13	28,129	12	31,945
United States ... ..	154	222,483	157	303,187	290	670,917
China ... ..	8	10,365	19	41,161	12	23,987
Japan ... ..	4	5,150	34	83,179	136	326,725
New Caledonia ... ..	100	97,823	118	143,867	73	123,796
Java ... ..	20	26,837	45	89,129	14	36,651
Philippine Islands ... ..	14	19,323	31	44,825	104	258,686
Hawaiian Islands ... ..	...	.....	94	107,248	43	93,045
Peru ... ..	15	17,676	28	37,411	82	122,745
Chili ... ..	100	115,222	211	295,829	508	939,249
Other Foreign Countries ... ..	152	92,893	166	149,473	268	305,787
Total, Foreign ... ..	675	817,284	1,033	1,664,110	1,721	3,507,305
All Tonnage ... ..	4,643	4,635,381	5,498	7,870,503	6,443	12,080,235

It will be seen from the above figures that out of a total tonnage amounting to 12,080,235 in 1907, vessels from other Australian States aggregated 5,177,848, or 42·9 per cent. of the whole. The United Kingdom furnished the next largest tonnage with 1,638,480 tons, or 13·6 per cent., followed by New Zealand with 977,005 tons, equal to 8·1 per cent.; Chili with 939,249 tons, or 7·8 per cent.; United States with 670,917 tons, or 5·6 per cent.; and Germany with 423,672 tons, or 3·5 per cent. of the total. During the seventeen years—1890–1907—the tonnage of the United Kingdom increased by 987,347 tons, or nearly 152 per cent., while British tonnage as a whole increased by 4,754,833, or over 124 per cent., the Chilean tonnage by 824,027 tons, or 715 per cent., United States tonnage by 448,434 tons, or 202 per cent., and the German tonnage by 290,304 tons, or nearly 218 per cent.

The tonnage for Chili shows a marvellous increase, but the vessels arriving from this country, and nearly all South American ports, are almost wholly in ballast.

The great increase in the German tonnage is due to the large volume of business captured by the heavily-subsidised vessels of the various German lines. In fact, considerable impetus has been given to all the foreign shipping trade with Australia through the subsidising of the lines by several of the foreign Governments. The North German Lloyd, for example, receives an annual subsidy from the German Government of £126,160, equal to nearly

4s. 6d. per mile for mail services. To protect the interests of the German agriculturists it is stipulated in the agreement that the mail steamers shall not carry on their homeward journey frozen meat, dairy produce, or such cereals as are grown in Germany. The Japanese Government subsidises its steamers trading to Australia to the extent of £47,300 per annum, and the Messageries Maritimes receives a subsidy of 8s. 4d. per mile. Of the British lines the Peninsular and Oriental receives £85,000 per annum, the Orient-Pacific £120,000 per annum, with an addition of £4,880 per annum provided the service is continued to Brisbane, and the Canadian-Australian £64,000 per annum, for carrying the mails to and from Australia.

#### STEAM AND SAILING VESSELS.

The records prior to the year 1876 do not distinguish the steamers from the sailing vessels, but the modern tendency to supersede sailing vessels by steam has been abundantly apparent in the thirty-one years which have since elapsed. In 1876 the steam tonnage was 912,554 as compared with 1,215,171 tons of sailing vessels, being 42·9 per cent. and 57·1 per cent. respectively. The relative positions have long since been transposed, for the tonnage of sailing ships in 1907 was only slightly higher than the figures of 1876, being 1,594,747 tons, or but 13·2 per cent. of the total shipping, as compared with 10,485,488 tons of steam, or 86·8 per cent. of the whole. The steam tonnage in 1907 was, therefore, eleven times as great as in 1876. The progress of the tonnage of each class will be seen from the following table :—

Year.	Steam.		Sailing.		Proportion of Steam to Total Tonnage.	
	Entered.	Cleared.	Entered.	Cleared.	Entered.	Cleared.
	tons	tons	tons	tons	per cent.	per cent.
1876	473,821	438,733	600,604	614,567	44·10	41·65
1880	803,935	746,437	438,523	443,884	64·71	62·71
1885	1,413,551	1,378,292	674,756	666,478	67·69	67·41
1890	1,759,475	1,768,848	580,995	526,063	75·18	77·08
1895	2,132,753	2,161,176	718,793	693,529	74·79	75·71
1900	3,206,657	3,140,449	808,098	715,299	79·87	81·45
1905	4,051,884	4,042,703	645,627	641,405	86·26	86·31
1907	5,257,019	5,228,469	813,934	780,813	86·59	87·01

The advantage offered by the New South Wales trade to shipowners is illustrated by the rather peculiar feature of the large amount of tonnage coming to the State in ballast, and the small amount leaving without cargo. A large proportion of the vessels arriving in ballast come from the ports of the neighbouring States, where they have delivered a general cargo, and, having been unable to obtain return freight, have cleared for Newcastle to load coal. The largest amount of tonnage entered in ballast in any one year since 1876 was in 1907, when it reached 1,980,322 tons. The tonnage entered and cleared in ballast for the years shown was :—

Year.	Steam (Ballast).		Sailing (Ballast).		Proportion of Ballast to Total Tonnage.	
	Entered.	Cleared.	Entered.	Cleared.	Entered.	Cleared.
	tons	tons	tons	tons	per cent.	per cent.
1876	16,709	4,022	246,244	13,834	24·47	1·70
1880	73,006	3,015	144,757	13,204	17·53	1·36
1885	146,501	11,181	198,865	42,200	16·54	2·61
1890	309,780	3,767	228,699	18,620	23·01	·98
1895	375,589	26,802	466,401	6,630	29·53	1·17
1900	791,803	133,159	505,030	1,644	32·30	3·50
1905	882,539	127,268	466,774	16,956	28·72	3·08
1907	1,341,336	192,027	638,986	24,939	32·62	3·61

Although the proportion of tonnage entered in ballast fluctuated between 16·5 per cent. in 1885 and 32·3 per cent. in 1900, the tendency is for the figure to stand at about one-quarter of the whole. The tonnage cleared in ballast is very small; up to 1900 it was under 2 per cent., and is now just over 3 per cent. The reason why so small a proportion of Australian shipping clears in ballast is principally to be found in the great and varied resources of the country; for when the staple produce—wool—is not available, cargoes of wheat, coal, silver, copper, live-stock, frozen meat, butter, fruit, tallow, leather, skins and hides, and other commodities may generally be obtained. Besides, owing to the great distance of the ports of the Commonwealth from the commercial centres of the old world, vessels are not usually sent out without at least some prospect of securing a return cargo. As a rule, it does not pay to send vessels to Australasia seeking freights, as is commonly done with regard to European and American ports.

#### PORTS.

No other seaport of the State can be compared with either Sydney or Newcastle, though Wollongong now maintains a trade of some consequence, especially in coal; and of late years the importance of Eden, Twofold Bay, has increased.

The progress of the shipping trade of Sydney has been very uniform, the increase from the year 1860 being at an average rate of about 5·3 per cent. per annum, and from 1890 at the rate of 5·1 per cent. per annum. The vessels registered as entered considerably exceed in tonnage those cleared at Port Jackson. To account for this it is only necessary to state that vessels leaving Sydney for Newcastle for the purpose of shipping coal are reckoned as departures from Newcastle, and not from Sydney. For this reason the clearances of Newcastle uniformly exceed the arrivals, as will be noticed in the subsequent table. The practice of clearing vessels at both ports at one time obtained, but has been abandoned for many years, and vessels are now cleared at the port which they last leave. The following statement shows the shipping entered and cleared at both Sydney and Newcastle for quinquennial periods from 1860 to 1905, and for the year 1907:—

Year.	Sydney.		Newcastle.	
	Entered.	Cleared.	Entered.	Cleared.
	tons.	tons.	tons.	tons.
1860	292,213	275,630	111,274	134,480
1865	423,570	421,049	189,620	248,769
1870	385,616	364,758	283,091	383,242
1875	590,700	468,423	510,902	573,626
1880	827,738	641,996	400,598	516,480
1885	1,608,169	1,283,888	452,946	722,865
1890	1,644,589	1,356,632	625,398	842,180
1895	2,027,951	1,669,654	727,834	1,048,400
1900	2,716,651	2,109,739	1,160,758	1,523,976
1905	3,401,013	2,922,461	1,182,267	1,586,134
1907	4,273,995	3,717,792	1,657,234	2,044,706

The total tonnage of Sydney increased by 902,000 tons between 1860 and 1880, and by 3,357,000 tons between 1880 and 1900, while during the last two years the increase has amounted to 1,668,313 tons.

The returns for Newcastle also show a great advance, the tonnage entering having nearly doubled during the last eleven years. As might, perhaps, be anticipated from the nature of the trade of the two ports, a large number of

sailing vessels visit Newcastle, the proportion of tonnage being over 28 per cent. In Sydney the proportion is only about 8 per cent.

The other ports of the State are of minor importance compared with Sydney and Newcastle, the total tonnage of all of them only amounting to 139,724 entered and 246,781 cleared, or about 3·2 per cent. of the whole. In 1907 the tonnage of vessels which entered Wollongong direct from places outside the State totalled 92,320 tons; while at Eden the shipping entered amounted to 31,644 tons. The shipping cleared at Wollongong had an aggregate tonnage of 197,832, and at Eden (Twofold Bay) 31,957. The bulk of the trade of Twofold Bay is with Tasmania.

During recent years a fairly large trade has sprung up between Brisbane and the northern rivers—Clarence, Richmond, and Tweed. In 1907 the total tonnage of vessels entered at these rivers from places beyond the State was 8,413, and of vessels cleared 9,748. The remaining ports at which shipping was recorded, and the tonnage of vessels cleared thereat were Port Stephens, 6,387; Manning River, 332; Port Macquarie, 528 tons.

That Sydney is one of the chief ports of the world is evident from a comparison with the returns of other ports as shown by the following table, which states the total tonnage entered at various ports of the British Empire and foreign countries. The figures quoted refer to the latest years available, all being subsequent to 1905:—

Port.	Tonnage Entered.	Port.	Tonnage Entered.
<i>Sydney</i> ... ..	4,273,995	Singapore ... ..	6,466,411
Melbourne ... ..	4,050,768	Hongkong ... ..	11,050,070
Brisbane ... ..	1,187,080	Capetown ... ..	3,353,699
Port Adelaide ... ..	2,288,334	Hamburg ... ..	9,407,748
Fremantle ... ..	1,070,850	Marseilles ... ..	6,093,193
Hobart ... ..	736,732	Havre ... ..	2,810,500
Auckland ... ..	540,718	Antwerp ... ..	9,815,935
London ... ..	11,222,542	Rotterdam ... ..	7,873,652
Liverpool ... ..	8,145,441	Copenhagen ... ..	2,625,348
Cardiff ... ..	5,295,331	New York ... ..	9,630,853
Tyne Ports ... ..	5,548,111	Boston ... ..	2,604,529
Hull ... ..	2,915,370	Buenos Ayres ... ..	4,100,048
Calcutta ... ..	1,645,010	Shanghai ... ..	3,603,874
Bombay ... ..	1,763,286	Monte Video ... ..	6,580,940

It will be seen from the above list that Sydney stands thirteenth in importance. The figures for Singapore, Hongkong, and Shanghai are large on account of their extensive distributing trade.

#### SHIPPING REGISTERED.

At the end of the year 1907 there were 971 steamers and sailing vessels, representing 115,900 tons net, registered in the books of the Navigation Department, as belonging to the port of Sydney. Of these, 555 were steamers, collectively of 72,226 tons net. There were 56 steamers of 5,116 net tons, and 46 sailing vessels on the register at Newcastle, their net tonnage being 6,771. The total tonnage registered in the State was 127,787, of which

77,342 was steam tonnage. These figures are exclusive of lighters, of which there were 211, of a total tonnage of 9,399, registered at Sydney; and 47, of an aggregate tonnage of 5,126, at Newcastle. A fee of £1 is charged for a lighter's license, which permits the boat to be employed for an indefinite period.

The total tonnage registered in New South Wales during the years shown was :—

Year.	Steamers.		Sailing Vessels.		Total.	
	No.	Tons.	No.	Tons.	Vessels.	Tons.
1870	14	1,494	50	8,349	64	9,843
1875	37	3,903	93	12,197	130	16,100
1880	20	2,159	54	7,003	74	9,162
1885	50	6,387	49	4,876	99	11,263
1890	21	4,027	28	6,234	49	10,261
1895	13	5,172	13	1,363	26	6,535
1900	23	10,445	31	4,289	54	14,734
1905	37	3,018	11	1,103	48	4,121
1907	35	7,664	15	3,294	50	10,958

During the year 1907 twenty-three vessels, aggregating 2,292 tons, were sold to foreigners, and in consequence were removed from the registers of the State. Sales were also made to British subjects of 67 vessels, with a total tonnage of 5,430, which remained on the registers at Sydney and Newcastle.

The only ports at which vessels are registered are Sydney and Newcastle, and the following statement shows the number of steam and sailing vessels registered at each port on the 31st December, 1907, classified according to their tonnage :—

Tonnage.	Sydney.				Newcastle.			
	Steam.		Sailing.		Steam.		Sailing.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Under 50.....	307	6,327	263	3,941	42	984	21	551
50 and under 100 ...	104	7,461	81	6,139	9	603	13	926
100 „ 200 ...	67	9,328	24	3,446	2	217	2	244
200 „ 300 ...	21	5,284	14	3,600	...	.....	1	235
300 „ 400 ...	17	5,762	12	4,228	...	.....	4	1,393
400 „ 500 ...	8	3,422	2	895	...	.....	3	1,312
500 „ 600 ...	11	6,199	2	1,108	1	552	...	.....
600 „ 1,000 ...	5	4,209	9	7,578	...	.....	1	657
1,000 „ 1,400 ...	5	6,032	6	7,274	2	2,760	...	.....
1,400 „ 1,800 ...	6	9,502	1	1,466	...	.....	1	1,453
1,800 and over.....	4	8,700	2	3,999	...	.....	...	.....
Total .....	555	72,226	416	43,674	56	5,116	46	6,771

## CONSTRUCTION OF VESSELS.

The years 1883 and 1884 were marked by great activity in the construction both of sailing and steam vessels, 50 sailing and 52 steam vessels having been built in 1883, whilst 39 sailing vessels and 64 steamers were built in the subsequent year. Trade then became less active, and the industry showed a tendency to die out. In 1890 it had fallen lower than in any of the preceding years, and there has been little improvement since, the tonnage of sailing vessels built during 1907 being only 79, and of steamers 1,046.

Schooners and ketches are the principal classes of sailing vessels built in the State, the general tonnage of each class averaging considerably under 100 tons burden. The tendency to supplant sailing vessels by steamers, and the substitution of iron for wood for the frames and hulls of vessels, have given a check to the wooden ship-building industry, which at one time promised to grow to important dimensions.

Up to 1905 no reliable data were procurable as to the number and tonnage of vessels built abroad for the New South Wales local trade, and such vessels formed an import of large value altogether lost sight of in the Customs returns. In 1907, however, the Customs returns show that 15 vessels valued at £259,700 were imported from abroad. A further idea of the large number imported may be gathered from the registration of vessels other than those built in New South Wales. During the last five years there were 34 steam vessels of 28,066 total tonnage and 19 sailing vessels of 7,541 total tonnage registered which were not built in the State.

## THE NAVIGATION DEPARTMENT.

By the Navigation Amendment Act of 1899 the Marine Board was abolished, and a Department of Navigation and Courts of Marine Inquiry constituted in its stead. The powers and duties of the Department and Courts were defined by this measure, and the Navigation Acts of 1871-1896 were amended to accord with the new legislation.

The Navigation Department supervises all matters relating to navigation, and transacts all business in connection with the issue of certificates of competency; the framing of harbour regulations; the preservation of ports, harbours, rivers, &c.; the regulation of lighthouses, lights, and river-marks, moorings, licenses to lighters, watermen's boats, ferries, harbour and river steamers, &c. It controls the pilot service, and administers the rules relating to the marking of load lines, the life-saving appliances on ships, and accommodation for seamen. A District Court Judge presides over the Court of Marine Inquiry, which conducts inquiries as to shipwrecks and other casualties affecting ships, or as to charges of incompetency or misconduct on the part of the masters, mates, or engineers of ships, either in the case of British ships on or near the coast of New South Wales, or on a ship registered in New South Wales. The court has the power to suspend or cancel certificates, and determines appeals in respect of the detention of ships alleged to be unsafe.

## THE SYDNEY HARBOUR TRUST.

The Sydney Harbour Trust Act, which came into force on the 1st November, 1900, was passed in order to make better provision for the management of the port of Sydney, to establish a board of commissioners, and to confer on such body certain powers in relation to the port, including power to levy

and collect certain dues and charges, and to purchase and resume lands; to vest certain property in the commissioners; and for various other purposes. The three commissioners were created a body corporate, each member of the board being entitled to hold office for seven years. They have exclusive control of the port and shipping, lighthouses, beacons, buoys, wharves, docks, &c., and the preservation and improvement of the port generally is vested in them. Power is given to collect rates and charges in accordance with the Wharfage and Tonnage Acts and amending Acts, and all such statutes are *mutatis mutandis* incorporated with the Harbour Trust Acts, and unless otherwise provided, all rates leviable under those statutes may be collected by the Commissioners.

#### QUARANTINE.

The Board of Health have entire control of all matters relating to health, and may place in quarantine any vessel, should they deem it advisable to do so for the preservation of the public safety. In the course of the year 1907 the Government Health Officers at Sydney and Newcastle examined 969 vessels, of which 160 were detained for special action. The passengers examined numbered 9,656, and the crews of the vessels, 39,298. There is only one quarantine station in the State for human beings. It is situated inside the North Head of Port Jackson, and in equipment and suitability of position it is surpassed by few quarantine stations in the world. There are also two stations in Sydney Harbour, one at Bradley's Head, the other at Athol Bay and one at the port of Newcastle, where foreign and Australian live stock may be placed in quarantine. The regulations for the quarantine of animals are enforced by the Stock Branch of the Department of Mines and Agriculture.

#### DOCKS AND WHARVES.

Adequate accommodation is provided both by the Government and by private enterprise for fitting and repairing ships in the State. At Sydney there are four graving docks, five floating docks, and three patent slips. At Newcastle there are three patent slips; besides which there are other docking and building yards in different parts of the State for the convenience of coasters and small craft.

The Sutherland Graving Dock at Cockatoo Island, Sydney, the property of the Government, is one of the largest single docks in the world; it is 608 feet long and 84 feet broad, and is capable of receiving vessels drawing 32 feet of water. The Fitzroy, another large Government graving dock on Cockatoo Island, is capable of receiving vessels drawing 21 feet 6 inches of water. The gross tonnage of vessels docked at the two Government docks during the year 1907 amounted to 62,639 tons. In addition the Morts' Dock and Engineering Company own two large graving docks, one at Balmain and the other at Woolwich, the latter being 640 feet long, and 75 feet on floor, and capable of receiving vessels with a draught of 28 feet.

For natural facilities for shipping Sydney stands unrivalled. The water deepens abruptly from the shores, so that the largest vessels may be berthed alongside the wharves and quays. At low tide the depth of water ranges between 12 and 30 feet. Practically the whole of the wharfage at Port Jackson is now under the control of the Sydney Harbour Trust. Along the shores of Sydney Cove magnificent echelon wharves have been constructed, which are capable of berthing vessels of 14,000 tons register.

At Pyrmont, Darling Harbour, and Woolloomooloo Bay the wharves are fitted with steam cranes and other appliances for the speedy discharge of the largest ships constructed, while elevators have been erected to facilitate the loading of wheat, and on all the jetties the railway line is laid down. Powerful shipping appliances and roomy stores, as well as electric lighting, are to be found on all the important wharves, which are extended and improved in order to keep pace with the growing shipping of the port.

Newcastle is also a well-equipped port, where vessels of 8,000 tons can be safely berthed; and every modern steam and hydraulic appliance for loading coal is found on its wharves. The Government owns nearly all the wharfrage.

At the harbour of Wollongong vessels drawing 11 feet 6 inches of water can be berthed, and a large cargo shed, coal shoots, cranes, and derrick are available for the use of shipping. Staiths, cranes, and other coal-shipping appliances have been erected at Bulli, Coal Cliff, and other places. Private as well as Government wharves are found at all the chief centres of population along the rivers of the State, and all ports with a trade of any importance have their jetties and shipping facilities. There are also five Government graving docks on rivers to the north of Sydney, and one on the Shoalhaven River to the south; these are small, however, only being capable of accommodating vessels from 6 feet to 10 feet draught.

#### LIGHTHOUSES.

The coast of New South Wales, which is about 700 miles in length, is well provided with lighthouses, the number at the end of 1907 being 25, besides which there were numerous lighted beacons, leading lights, and light-ships for the safety of harbour navigation. The Smoky Cape group-flashing light, the Macquarie revolving electric light, on the South Head of Port Jackson, and the Cape Byron group-flashing light are amongst the most powerful lights in the world, the first named being visible 28 miles at sea, and each of the others 26 miles. In addition there are lighthouses on Point Perpendicular, visible 24 miles; Seal Rocks, visible 23 miles; and Montagu Island, visible 22 miles.

#### SHIPWRECKS.

The State seaboard is free from any source of danger to vessels, and where reasonable precautions were taken wrecks have been very rare. There are only two lifeboat stations on the coast, one at the Sydney Heads, and the other at Newcastle; but the whale-boats at the various pilot stations have been fitted with cork linings, and otherwise made useful for the work of rescue, in which many of them have been of excellent service. The steam tugs subsidised by the Navigation Department for the towing of ships in and out of port, are also available for the purpose of rendering assistance to vessels in distress; and life-saving appliances are kept at certain places along the coast.

The wrecks reported in 1907 numbered 5, and of the persons comprising the crews and passengers, no lives were lost. There were 4 steam vessels and 1 sailing, while the total tonnage of the vessels was 716. The value, including cargoes of the five vessels, was £17,945.

During the last five years there have been 39 vessels wrecked on the shores of New South Wales, or otherwise within the jurisdiction of the State. Of these 24 were steam and 15 sailing vessels, the total tonnage represented being 11,708. The number of lives lost was 60, the highest number in any year being 36 in 1904.

## WAGES OF SEAMEN.

The following table shows the average wages, per calendar month, in 1907, paid to white crews of British ocean-going steamers trading with New South Wales, and also the rates for white crews of steamers engaged in the Interstate trade. The rates have been obtained from the ships' articles deposited with the State shipping officers:—

Capacity.	Average monthly wages. White crews.	
	Ocean-going steamers	Interstate steamers.
Navigation—	£	£
Officers, chief ... ..	10 to 17	12 to 17
„ second ... ..	7 to 13	10 to 14
„ third ... ..	6 to 9	8 to 11
„ fourth ... ..	4 to 8	8
Seamen ... ..	3½ to 5	6½ to 7
Engineer's Department—		
Engineers, chief ... ..	16 to 30	16 to 27½
„ second ... ..	12 to 19	11 to 19
„ third ... ..	8 to 15	14 to 15
„ fourth ... ..	6 to 12	12
Firemen ... ..	4 to 5	8½ to 9
Trimmers ... ..	3½ to 4	6½ to 7
Cooking and Attendance—		
Cooks ... ..	5 to 12	8 to 12
Stewards, chief ... ..	5 to 14½	8 to 12
„ assistant ... ..	2 to 8	3 to 7
Stewardesses ... ..	2½ to 3½	2 to 5

The figures quoted in this table are average rates, but the wages paid on the ocean-going passenger steamers are in nearly every case higher than on the cargo steamers which also carry passengers. The top rates shown are the highest paid on the passenger steamers, while the bottom rates are a fair average on the cargo steamers.

The crews of some of the British steamers trading to the State are composed partly of coloured seamen, chiefly Lascars and Chinese. In the following table will be found the average rates of wages paid to the various employees in this class:—

Capacity.	Average monthly wages.		Capacity.	Average monthly wages.	
	Lascars.	Chinese.		Lascars.	Chinese.
Navigation—	shillings.	shillings.	Cooking and Providoring:	shillings.	shillings.
Boatswain ... ..	49	47-56	Cook ... ..	40	28-65
Boatswain's mate ... ..	32-40	.....	Sailor's cook ... ..	27-33	23-28
Carpenter ... ..	58	47-56	Firemen's cook ... ..	27-33	23
Painter ... ..	.....	43	Baker ... ..	17-40	47
Lampman ... ..	26	28	Storekeeper ... ..	30	39-47
Winchman ... ..	30	.....	Pantryman ... ..	25	19-30
Quartermaster ... ..	37	45	Butcher ... ..	47	23
A.B. ... ..	.....	28	Water turncock ... ..	30	.....
Ordinary seaman ... ..	.....	24	Iceman ... ..	19	.....
Lascar (not otherwise described).	33	.....	Knifeman ... ..	17	.....
Engineer's Department—			Scullion ... ..	17	15
Electrician ... ..	.....	51	Attendance—		
Fitter ... ..	.....	51	Chief steward ... ..	.....	56
Machinist ... ..	.....	47	Second steward ... ..	.....	32
Donkeyman ... ..	.....	30-39	Waiter ... ..	29	23-41
No. 1 fireman ... ..	36	45-49	Cabin boy ... ..	10	23
Fireman ... ..	20-24	26-37	Officer's boy ... ..	.....	15-24
No. 1 trimmer ... ..	.....	45	Messroom boy ... ..	.....	23-28
Trimmer ... ..	17	26-32	Bath boy ... ..	.....	19
Greaser ... ..	33	37	Sweeper ... ..	16	19-23

## COMMERCE.

THE trade of New South Wales is the largest of all the States of the Australian Commonwealth, and, relatively to population, compares most favourably with that of any other country in the world. The growth of the trade of the State during the last forty-eight years will be seen from the table appended. The figures quoted represent the values as furnished by the Customs Department. As regards imports, the value represents the amount on which duty is payable or would be payable if the duty were *ad valorem*. The value of goods subject to duty is taken to be the fair market value in the principal markets of the country whence the same were exported, with an addition of 10 per cent. to such value. This addition of 10 per cent. is supposed to cover the cost of packing, insurance, freight, and all other charges. The value of goods exported is the value in the principal markets of the State in the ordinary commercial acceptance of the term. These values are verified by the customs officers with the prices ruling from day to day in the local markets :—

Period.	Imports (Average Annual Value).	Exports (Average Annual Value).	Total Trade.	
			Value.	Per Inhabitant.
	£	£	£	£ s. d.
1860-64	8,778,305	7,780,512	16,558,817	45 12 6
1865-69	8,936,766	9,473,835	18,410,601	42 3 9
1870-74	10,191,726	10,999,660	21,191,386	40 4 8
1875-79	14,399,377	13,316,609	27,715,986	43 15 4
1880-84	19,582,946	17,701,505	37,284,451	46 9 0
1885-89	21,662,848	19,040,971	40,703,819	40 13 6
1890-94	20,536,781	22,692,220	43,229,001	36 18 10
1895-99	21,669,230	24,957,958	46,627,188	36 2 0
1900-04	26,903,925	27,776,457	54,680,382	39 3 0
1905	29,424,008	36,782,006	66,206,014	44 15 6
1906	34,665,363	45,638,044	80,303,407	53 0 7
1907	39,456,195	48,774,978	88,231,173	56 14 11

The trade has grown steadily in volume throughout the whole period. From 1904 it advanced by considerable annual increases, until in 1907 it reached the record figure of over £88,200,000. In 1907 the trade was worth £56 14s. 11d. per head, a value far in excess of that recorded at any other period of the commercial history of the State. Even in the sixties, when the population was small and prices were high, and in the eighties, which were years of heavy borrowing, the trade value did not nearly reach that of 1907. The value of the exports from year to year forms the surest index of the progress of a country like New South Wales, and the result of a rise or fall in the value of the staple commodities, or of a depression in production, may be readily traced in the corresponding rise or fall in the export values. The imports must be considered in connection with loans raised outside the State by the State and local governing bodies, as these loans reach the State in the shape of goods which are shown in the import returns. Thus 1881 to 1891, and 1899 to 1902, were years of large borrowing. In the years 1900 and 1901 also the imports underwent abnormal expansion on account of the loading-up by merchants in anticipation of the Federal tariff. Bearing these facts in mind it will be seen that the volume of trade has more than doubled during the last ten years.

Of the total trade shown in the above table about 40 per cent. is carried on with the other Australian States, the remaining 60 per cent. representing the direct overseas trade with countries outside Australia. For reasons that are mentioned later, the returns of interstate trade are rather misleading. It has, however, been customary for years to make up these returns, and, as the information is demanded by the States, the figures must be taken into account. Distinguishing then the imports according as they came interstate or directly overseas, the following were the annual values from 1885 to 1907:—

Period.	Imports (Average Annual Value).			Per head of Population.	
	Interstate.	Oversea.	Total.	Oversea.	Total.
	£	£	£	£ s. d.	£ s. d.
1885-89	8,148,314	13,514,534	21,662,848	13 10 2	21 12 11
1890-94	8,847,672	11,689,109	20,536,781	9 19 9	17 11 0
1895-99	9,435,784	12,233,416	21,669,230	9 9 5	16 15 7
1900-04	11,485,186	15,418,739	26,903,925	11 0 9	19 5 3
1905	14,938,885	14,485,123	29,424,008	9 15 11	19 18 0
1906	17,061,860	17,603,503	34,665,363	11 12 6	22 17 10
1907	18,595,804	20,860,391	39,456,195	13 8 4	25 7 6

The figures shown in this table for 1904 and subsequent years are not quite on the same basis as the previous years, when the oversea imports should be increased and the interstate imports decreased by a corresponding amount on account of transshipments. Until September, 1903, it was the practice of the customs office to ignore transshipments, so that goods which arrived from a country outside Australia at any Australian port, and were thence transhipped to New South Wales, were recorded as an import from the State where they were transhipped, and not as they ought to have been, as an oversea import. It is impossible now to ascertain the value of these transhipped goods, but it is believed to have ranged each year between £500,000 and £1,000,000. Another alteration in its methods by the Customs Department in 1904 was, that goods of Australian produce sent from another State to New South Wales for transshipment abroad, were recorded first as an interstate import, and next, as an oversea export. Previously they were not recorded at all. The greater part of such produce came from Queensland and Tasmania, and although it is not possible to estimate its value, it was considerable, inasmuch as in 1904. it amounted to £2,652,285, and in 1907 to £3,537,378. It is therefore apparent that in comparing those two with previous years the two factors just mentioned should be taken into consideration. However, taking the figures in the table as they stand, it will be seen that the later eighties, so far as the oversea imports are concerned, exhibit a high value per head. Heavy imports were to be expected owing to the large State loans obtained from abroad during these years.

In 1891 the imports averaged £22 4s. 6d. per head; but from that year the values per head of population steadily declined until 1895, when they touched the lowest point on record since the State was restricted to its present boundaries, thirty-five years before. The falling-off was due mainly to two causes—first, to the large diminution in public and private borrowings; and, second, to the fall in prices, which extended to nearly all the commodities that the State imports. In 1896, however, the value rose to £16 3s. 8d. per head, and the improvement continued until 1900, after which it declined down to 1904. From that year a steadily increasing improvement set in, which culminated in 1907.

The next statement shows the average annual exports in the same years as in the preceding table, also distinguishing the interstate and oversea movements:—

Period.	Exports (Average Annual Value).			Per head of Population.	
	Interstate.	Oversea.	Total.	Oversea.	Total.
	£	£	£	£ s. d.	£ s. d.
1885-89	8,416,648	10,624,323	19,040,971	10 12 4	18 16 6
1890-94	9,553,336	13,138,884	22,692,220	11 4 7	19 7 10
1895-99	7,972,150	16,935,808	24,957,958	13 3 0	19 6 6
1900-04	8,896,716	18,879,740	27,776,456	13 10 4	19 17 9
1905	12,263,472	24,518,534	36,782,006	16 11 7	24 17 6
1906	14,651,156	30,986,888	45,638,044	20 9 3	30 2 9
1907	15,830,905	32,894,073	48,774,978	21 3 2	31 7 5

It will be understood from what has just been said that the exports prior to 1904, to be strictly comparable with that year, require to have the oversea movement increased by the value of goods sent from other States to New South Wales for transshipment abroad. On the other hand, such goods sent from New South Wales to other States were formerly reckoned among the oversea exports, but are now included with the interstate. The present practice of counting such goods as exported from the place where they are actually placed on board oversea vessels has been in force since the 1st September, 1903, and was adopted so as to avoid the confusion that might arise from a continuance of the former practice, and the possibility of transshipments being treated as oversea exports both at the place of production and the place of final export.

From the above table it will be seen that the exports in 1907 were the highest for the whole period dealt with, both absolutely and relatively, being higher than in 1906, which previously was the best year. In 1891 the figures were high, but the returns were increased on account of large shipments of wool which were held over from the preceding year on account of maritime strikes. The years showing out most unfavourably were 1886, 1894, and 1902, all of which were influenced by adverse seasons or falling prices.

Judged by the volume of its exports per inhabitant, New South Wales compares favourably with any other country whose commerce is at all considerable, as an export of from £19 to £31 can be paralleled only by a few countries, such as Belgium, whose trade is largely made up of re-exports. The following table affords a comparison of the trade of New South Wales with that of the other Australian States and the principal British possessions and foreign countries. The figures represent the average annual value during the last three years:—

Country.	Total Trade.	Value per Inhabitant.	Country.	Total Trade.	Value per Inhabitant.
	£	£ s. d.		£	£ s. d.
<i>New South Wales</i>	78,246,000	51 12 4	Canada ...	102,350,000	17 15 7
Victoria ...	52,061,000	42 6 10	German Empire ...	615,120,000	10 6 8
Queensland ...	21,263,000	39 17 6	Belgium ...	377,465,000	53 2 0
South Australia ...	21,862,000	57 8 3	France ...	489,979,000	12 9 7
Western Australia	16,453,000	63 15 9	Switzerland ...	141,296,000	41 5 0
Tasmania ...	6,821,000	38 0 5	United States of America	670,156,000	7 18 10
New Zealand ...	33,054,000	36 11 0	Mexico ...	47,196,000	3 9 4
United Kingdom..	1,068,323,000	24 9 4	Argentina ...	88,777,000	17 16 4
Cape Colony ...	54,204,000	22 1 4	Japan ...	79,730,000	1 13 5

It will be seen from the above that of the Australian States, Western Australia and South Australia have a greater trade in proportion to

population than New South Wales, which might be expected when it is remembered that Western Australia is a large gold-producing State with a small population, and that South Australia has a large re-export trade in the products from the Broken Hill silver-mines. The trade of New South Wales per inhabitant exceeds that of all British possessions, and of foreign countries, except Belgium, which has a large re-export and transit business. In all the above countries the re-export trade is included. If the re-export trade is excluded in the case of Belgium and Switzerland, the values per head are reduced by about £15 in each case.

#### BALANCE OF TRADE.

New South Wales is a debtor country, and its trade is affected by the imports of capital and the payments of interest due thereon. In former years the annual imports of capital, both on public and private account, were large, and exceeded the necessary payments of interest, so that the balance of trade showed an excess of imports. Of late years capital has still been imported, but in smaller amounts not equal to the interest payments, so that the exports since about 1892 have been the greater.

The following is a statement of the balance of trade for each of the last twenty years:—

Year.	Excess of Exports or Excess of Imports (—).	Year.	Excess of Exports or Excess of Imports (—).
	£		£
1888	(—) 309,147	1898	3,194,557
1889	431,877	1899	2,851,151
1890	(—) 569,067	1900	603,445
1891	560,623	1901	422,906
1892	1,195,721	1902	(—) 2,430,159
1893	4,814,188	1903	47,890
1894	4,775,732	1904	5,718,574
1895	5,942,370	1905	7,357,998
1896	2,448,839	1906	10,972,681
1897	2,006,722	1907	9,318,783

During the last twenty years the balance of trade has been against the State three times. In the first year there was heavy borrowing by the Government, and also in 1902. The years 1900 and 1901 were affected by the large imports in anticipation of the Federal tariff. In 1907 the excess of exports amounted to over 9½ millions sterling, this large balance being due to the largely increased production from primary industries during the year, together with increased prices, so that it was again possible as in the three years preceding to send away a large amount to reduce past indebtedness, and also to hold in London.

#### ARTICLES OF IMPORT.

In order to show as clearly and concisely as possible the nature of the goods imported into New South Wales, those brought into the State during 1907 have been classified under certain leading heads, as shown in the table

below. A distinction has been made between produce of any of the Australian States, and produce of British and foreign manufacture :—

Articles of Import.	Australian Produce.	British and Foreign Produce.	Total Imports.
<b>Food, Drink, Narcotics, and Stimulants—</b>	£	£	£
Animal food ... ..	434,242	259,298	693,540
Vegetable food ... ..	2,572,160	569,334	3,141,494
Drinks—alcoholic ... ..	115,803	702,819	818,622
" non-alcoholic ... ..	10,158	9,291	19,449
Tobacco and other narcotics ... ..	115,092	384,890	499,982
Other stimulants and condiments ... ..	108,690	827,483	936,173
	3,356,145	2,753,115	6,109,260
<b>Live Animals and Plants—</b>			
Animals of all kinds ... ..	1,878,282	59,862	1,938,144
Plants ... ..	13,000	24,026	37,026
	1,891,282	83,888	1,975,170
<b>Textile Fabrics, Dress, and Manufactured Fibrous Materials—</b>			
Silk manufactures ... ..		374,931	374,931
Woollen manufactures ... ..	105,142	1,144,805	1,249,947
Cotton and flax manufactures ... ..	1,771	1,577,719	1,579,490
Manufactures of mixed materials ... ..	4,996	1,118,804	1,123,800
Dress ... ..	655,450	1,837,101	2,492,551
Manufactures of fibrous materials ... ..	33,920	529,067	562,987
	801,279	6,582,427	7,383,706
<b>Products of Arts and Manufactures, n.e.i.—</b>			
Books and stationery and paper ... ..	94,612	869,553	964,165
Musical instruments ... ..	5,652	197,886	203,538
Works of art and art materials ... ..	15,424	40,415	55,839
Fancy goods ... ..	6,663	256,188	262,851
Timepieces, jewellery, and plated ware ... ..	124,684	609,640	734,324
Surgical and scientific instruments ... ..	1,302	248,506	249,808
Metal manufactures, including machinery ... ..	393,923	3,762,449	4,156,372
Harness, vehicles, and equipment ... ..	44,174	373,634	417,808
Ships, boats, and equipment ... ..	1,038	262,906	263,944
Building materials ... ..	34,199	178,814	213,013
Furniture ... ..	76,445	148,454	224,899
Arms and explosives ... ..	28,505	263,634	292,139
Drugs, chemicals, and by-products ... ..	60,237	561,151	621,388
Glass and earthenware manufactures ... ..	17,416	322,180	339,596
Soap, candles, and paint ... ..	68,546	341,333	409,879
Other manufactures, n.e.i. ... ..	129,473	574,120	703,593
	1,102,293	9,010,863	10,113,156
<b>Staple Animal and Vegetable Substances, including Mineral Oils—</b>			
Animal substances ... ..	2,413,535	405,538	2,819,073
Vegetable substances ... ..	150,773	1,129,364	1,280,137
Oils ... ..	17,080	423,080	440,160
	2,581,388	1,957,982	4,539,370
<b>Staple Minerals and Metals, including Specie and Bullion—</b>			
Specie and bullion ... ..	3,122,894	1,226,979	4,349,873
Iron and steel ... ..	1,988	911,079	913,067
Other metals ... ..	2,417,728	234,593	2,652,321
Coal and shale ... ..	2,380	1,622	4,002
Stone, clay, and other minerals ... ..	1,112,013	91,254	1,203,267
	6,657,003	2,465,527	9,122,530
<b>Indefinite articles ... ..</b>	18,928	194,075	213,003
<b>Total Imports ... ..</b>	16,408,318	23,047,877	39,456,195

From this table it will be seen that about two-fifths of the imports are the produce of other Australian States. The whole of this, however, is not for local consumption. Gold bullion is imported for purposes of coinage, and is then re-exported. Merchandise to the value of £3,537,378, mostly

in the shape of staple products, was in transit to be transhipped to countries beyond the Commonwealth; while other raw staple products, especially animal and vegetable substances and minerals, after being slightly worked up, were eventually re-exported abroad. Goods of British and foreign production to the value of £2,207,999 were re-imported from other Australian States.

The principal articles retained for local consumption were those in the class comprising the products of arts and manufactures. By far the largest item in this class is metal manufactures, which includes machines and machinery; then follow books, stationery, and paper; timepieces and jewellery; drugs and chemicals; soap and candles; and arms and explosives.

The class comprising textile fabrics and dress came third, and included dress, cotton, woollen and mixed manufactures as the largest items. After these the largest class was that including articles of food and drink, of which vegetable food was the largest, then tea and other stimulants and condiments, followed by alcoholic drinks. The class containing staple minerals and metals was second, but this, as well as that comprising staple, animal, and vegetable substances, included many articles mostly intended for re-export.

#### EXPORTS OF DOMESTIC PRODUCE.

The exports from New South Wales consist chiefly of goods produced or manufactured in the State, the re-exports of extra-Australian produce being comparatively small.

Under the present conditions of development in the State, the export of domestic produce is a very fair indication of its progress in productive pursuits. The value of the domestic exports in 1907 was two and a half times as great as in 1887; and, speaking generally, the expansion during the intervening period of twenty years has been of a steady character. Wool constitutes the largest item of domestic export, and any fluctuation in the production or market value of the staple is plainly marked in the whole trade. In 1885 there was a sharp fall in the price of wool and staples generally, to the extent of about 12 per cent., while there were further losses due to a succession of dry seasons. The exports of produce other than that of the State also show a decline about this period, ascribable in part to the causes which affected the general exports, and to the establishment of direct communication between Great Britain and Queensland and Tasmania; but the lost ground has been more than recovered:—

Period.	Domestic Produce exported.			Other produce Re-exported, including Gold.
	Gold.	Commodities.	Total.	
	£	£	£	£
1860-64	8,275,407	20,785,535	29,060,942	9,841,618
1865-69	4,011,327	31,841,272	35,852,599	11,596,579
1870-74	3,492,628	37,919,502	41,412,130	13,586,172
1875-79	2,276,585	46,452,700	48,729,285	17,853,760
1880-84	1,853,038	65,491,703	67,344,741	21,162,787
1885-89	617,912	70,647,694	71,265,606	23,939,252
1890-94	1,795,935	87,228,778	89,024,713	24,436,387
1895-99	7,541,459	79,643,906	87,185,365	37,604,424
1900-04	3,824,785	93,655,603	97,480,388	41,401,896
1905	762,058	27,302,612	28,064,670	8,717,336
1906	757,064	31,480,900	32,237,964	13,400,080
1907	731,094	36,993,743	37,724,837	11,050,141

It should be explained that the value of export of domestic produce in 1904 and subsequent years depends upon an estimate. Owing to the manner in which the Customs Department now records the Interstate movements of goods, it is not possible to ascertain the value of any State's own produce exported to the other States—it is all combined as Australian produce. It has, therefore, been necessary to estimate the Interstate export of New South Wales produce, but it is believed that the figure quoted is substantially correct, as the bulk of such goods is produced in the exporting State.

The value of New South Wales produce exported in 1907 was the highest on record, both absolutely and relatively, this satisfactory result being due to increased production and high prices. There was a notable rise in the value of domestic produce exported during 1889, which was well sustained until 1893. This may be attributed in the first place to a fortunate succession of good seasons, and in the second to the production of silver, which became an important article of export in the year named. The large decrease in 1894 is fully accounted for by the fall in prices, the depression preventing such increased production as would have had the effect of sustaining the total export value. In 1895 and 1896 there was a further slight fall, although the average price of the commodities produced in the State was higher than in 1894; but although prices in 1897 were not so good as in 1896, the value of the domestic exports was greater, not only in the total amount, but in the average per head of population. The recovery in prices from 1898 onwards enabled the exports of domestic produce to show a decided increase on the values of the previous years, although 1902 and 1903 were affected by decreased production on account of adverse seasons.

In the presentation of these figures it will be seen that the value of commodities has been separated from that of gold, although in dealing with the exports of the Australian States, gold should be reckoned a commodity as much as wool, wheat, or any other article.

Below will be found the value of the trade per inhabitant, the subdivision being the same as that adopted in the previous table :—

Period.	Domestic Produce Exported.			Other Produce. Re-exported, including Gold.
	Gold.	Commodities.	Total.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1860-64	4 11 2	11 9 1	16 0 3	5 8 6
1865-69	1 16 9	14 11 10	16 8 7	5 6 4
1870-74	1 6 6	14 8 0	15 14 6	5 3 0
1875-79	0 14 5	14 13 5	15 7 10	5 12 9
1880-84	0 9 3	16 6 4	16 15 7	5 5 5
1885-89	0 2 3	14 2 5	14 4 5	4 15 8
1890-94	0 6 2	14 18 2	15 4 3	4 3 6
1895-99	1 3 4	12 6 8	13 10 0	5 16 5
1900-04	0 11 0	13 8 2	13 19 2	5 18 7
1905	0 10 4	18 9 3	18 19 7	5 17 11
1906	0 10 0	20 15 9	21 5 9	8 17 0
1907	0 9 5	23 15 10	24 5 3	7 2 2

From these figures, it appears that in spite of the large and increasing amount which the State owes to its outside creditors, and the great fall in prices previously referred to, the export of domestic produce available to pay for imports shows very little diminution.

As a country manufacturing for export New South Wales has not yet achieved a high position. So many channels have been presented for the successful employment of capital that little attention has been bestowed upon the possibility of New South Wales supplying other countries with its own manufactures; but as these outlets of capital are closed, the vast possibilities of the country in other directions will doubtless be recognised. The following table shows the nature of the domestic exports from New South Wales during 1907, the classification being similar to that adopted for the imports. The exports are divided into those to other Australian States and to oversea countries, those to other Australian States depending on an estimate as previously explained:—

Articles of Domestic Produce Exported.	To other Australian States.	To Countries Oversea.	Total.
Food, Drink, Narcotics, and Stimulants—	£	£	£
Animal food ... ..	310,634	1,850,543	2,161,177
Vegetable food ... ..	754,376	1,222,680	1,977,056
Drinks—alcoholic ... ..	37,462	15,905	53,367
„ non-alcoholic ... ..	11,384	1,242	12,626
Tobacco and other narcotics ... ..	220,203	1,209	221,412
Other stimulants ... ..	13,862	1,170	15,032
	1,347,921	3,092,749	4,440,670
Live animals ... ..	2,617,090	91,560	2,708,650
Plants ... ..	29,919	19,509	49,428
	2,647,018	111,069	2,758,087
Textile fabrics, dress, and manufactured fibrous materials ... ..	364,496	44,534	409,030
Products of arts and manufactures, n.e.i. ...	800,744	250,868	1,051,612
Staple Animal and Vegetable Substances, including Mineral Oils—			
Animal substances ... ..	3,027,937	16,453,703	19,481,640
Vegetable substances ... ..	40,701	329,858	370,559
Oils ... ..	14,307	203,011	217,318
	4,248,185	17,281,974	21,530,159
Staple minerals and metals ... ..	4,224,364	3,943,906	8,168,270
Specie and bullion ... ..	27	792,922	792,949
Indefinite articles ... ..	25,518	9,184	34,702
Total ... ..	12,493,033	25,231,804	37,724,837

Out of the amount £12,493,033 shown above as exported to other Australian States, considerably more than half was for export oversea, representing the value of wool sent from the Riverina and Western divisions of New South Wales to Victoria and South Australia, silver-lead ore and concentrates sent from Broken Hill to South Australia, and other staple products—agricultural, pastoral, and mineral—sent to both States. By far the larger portion of the

exports consists of raw materials, which are all practically produced for export abroad. The following table shows during the last three years the quantities and values of the principal articles of New South Wales produce exported direct to countries beyond the Commonwealth, and it will be apparent how the export trade depends on the production from primary industries, and is affected by the variation in prices :—

Articles Exported Oversea.	Quantity.			Value.		
	1905.	1906.	1907.	1905.	1906.	1907.
Wool .. .. . lb.	210,275,585	214,126,274	271,249,591	£ 10,057,590	£ 10,945,627	£ 14,608,869
Leather .. .. .				323,776	307,244	278,276
Tallow .. .. . cwt.	365,705	357,031	349,200	413,234	461,540	526,697
Skins and Hides .. .. .				669,012	832,353	893,476
Meats, all kinds .. .. .				916,830	948,802	1,074,336
Butter .. .. . lb.	14,413,676	22,991,303	17,832,354	614,224	962,877	769,463
Wheat .. .. . bushel	4,517,575	4,206,177	3,036,810	761,437	689,734	798,901
Flour .. .. . ton	34,292	33,962	35,544	277,651	249,290	292,973
Gold, bullion .. .. . oz.	184,717	185,050	184,851	762,048	756,485	736,940
Copper, ingots and matte .. cwt.	170,402	203,012	212,547	572,477	881,769	842,325
" ore .. .. . "	1,831	1,963	11,891	1,204	1,545	6,551
Silver and Lead .. .. .				717,409	876,515	1,066,381
Spelter and concentrates .. cwt.	203,790	336,312	905,399	38,306	82,879	148,593
Tin, ingots .. .. . "	37,709	47,775	49,434	264,840	432,228	426,131
" ore .. .. . "	14,259	9,536	10,797	61,475	49,473	61,893
Coal and Coke .. .. . ton	1,942,447	2,068,572	2,678,966	796,803	902,520	1,325,147
Timber, dressed and undressed .. .. .				311,851	335,166	319,755

It will be understood that the figures in the above table represent the direct exports only. In almost every case, and especially for wool and silver-lead, the real exports would appear very much larger if the Interstate transfers in transit were added.

The relative importance of these articles will be seen from the following statement, which is based on the experience of the three years in the above table, and which shows the proportion per cent. of the value of the export of each article to the total oversea export of domestic produce :—

Article.	Proportion per cent.	Article.	Proportion per cent.
Wool .. .. .	55.4	Copper .. .. .	3.6
Leather .. .. .	1.4	Silver and Lead .. .. .	4.1
Tallow .. .. .	2.2	Tin .. .. .	2.0
Skins and Hides .. .. .	3.7	Coal and Coke .. .. .	4.7
Meat .. .. .	4.6	Timber .. .. .	1.5
Butter .. .. .	3.6	All other articles... .. .	4.9
Wheat and Flour .. .. .	4.8		
Gold .. .. .	3.5		100.0

Wool is the great staple export of the State, and comprises over one-half of the value of the domestic exports. A marked feature of the wool trade is the growing disposition of buyers on the Continent of Europe to purchase their supplies direct from the State instead of obtaining them through the London brokers. Year by year the representatives of foreign manufacturers who visit Sydney for the purpose of attending the wool sales become more numerous. A little more than twenty years ago all the wool destined for Europe found its way to London, but in 1907 the shipments of the staple of local growth to Belgium, France, Germany, and Italy amounted to 170,580,316 lb., valued at £9,078,725. A direct trade with the Continent

is desirable, and its growth will be seen from the following table, giving at intervals since 1881 the destination of the wool exported, and the proportion taken by each country :—

Country.	Value.				Proportion.			
	1881.	1891.	1901.	1907.	1881.	1891.	1901.	1907.
United Kingdom .. ..	£ 4,062,766	£ 5,741,350	£ 3,853,003	£ 4,968,067	98·9	74·9	51·9	34·0
Belgium .. ..	3,933	1,019,614	874,012	2,417,768	·1	13·3	11·8	16·5
Germany .. ..	988	407,924	1,238,492	2,873,866	·0	5·3	16·7	19·7
France .. ..	.. ..	409,553	1,295,274	3,731,157	....	5·3	17·5	25·5
United States .. ..	40,008	88,981	39,159	207,952	1·0	1·2	·5	1·4
Other Countries—Oversea ..	20	3,038	120,174	415,059	·0	·0	1·6	2·9
Total .. ..	4,107,715	7,670,460	7,420,119	14,608,869	100·0	100·0	100·0	100·0

It will be observed that since 1881 the wool exported to the United Kingdom has decreased from 98·9 to 34·0 per cent. France and Germany both show proportionate increases throughout the whole period, rising from nothing in 1881 to 25·5 per cent. for France, and 19·7 per cent. for Germany in 1907.

The other products of the pastoral industry—leather, tallow, skins and hides, and meats—form an export of considerable value and amount to 12 per cent. of the total.

Shipments of the principal minerals are also made on an important scale. Coal forms one of the staple exports of New South Wales, the quantity shipped beyond the Commonwealth in 1907 reaching 2,644,507 tons, valued at £1,297,530.

The export of silver, silver-lead, and ore has become important since 1884, the value for 1893 amounting to £3,031,720, although, in consequence of the great fall in the price of the metal, due to the closing of the Indian mints and the stoppage of purchases by the United States Government, the value of the export greatly declined, being only £1,704,055 in 1898. The year 1900, however, witnessed a revival in production, and in 1907 the value of the export was £3,756,372. Extensive development has taken place in the copper-mining industry within recent years, the export of the mineral of local production increasing from £197,814 in 1896 to £853,644 in 1907. Twenty years ago the industry contributed about half a million to the exports of the State; but there was a steady decline from 1883 to 1894, when the value of the shipments of locally-produced copper was only £63,617. The satisfactory prices realised of late years have had a stimulating effect on the industry, and a similar cause accounts for the increase in the production of tin, the exports of which rose from £68,546 in 1896 to £90,482 in 1899 and to £491,486 in 1907. It should be explained that the amounts just quoted as the exports of silver-lead, copper, and tin, include the quantities transferred to other States, as practically the whole of these were for export abroad.

#### RE-EXPORT TRADE.

The re-export trade of the State increased considerably until 1889, but thereafter a marked decline was experienced. In 1895, however, an improvement was manifested, which has continued. The shipping facilities of Sydney at one time attracted to the port a large amount of trade from New Zealand, Queensland, and the South Seas, for transshipment to Europe; but the establishment of direct communication between those countries and Europe checked to some extent the expansion of the re-export trade.

The total value of the re-exports of the State will be found on reference to the previous tables showing the values, absolute and per head of population,

of domestic exports and re-exports. Gold, consisting largely of Queensland and New Zealand metal coined at the mint and shipped by the banks to London, the United States, and the East, forms a large proportion of the trade, while there is also a large re-export of wool, chiefly the produce of Queensland. In addition there is a fairly large trade in provisions and manufactured articles of British and foreign production with New Zealand, New Caledonia, Fiji, and other islands of the Pacific.

The total value of the re-exports in 1907 was £11,050,141, of which £6,507,614 was "Australian" produce, and £4,542,527 the produce of countries other than Australia.

Of the Australian produce £1,048,661 was re-exported to other States, and £5,458,953 oversea; while of the "other" produce £2,339,211, was sent to other Australian States, and £2,203,316 to countries oversea.

Amongst raw commodities the principal articles re-exported are tallow, skins and hides, tin, and wool; while the manufactured articles are chiefly apparel and soft goods, metal manufactures, iron and steel, machinery, drugs and chemicals, books and stationery, boots, beer and spirits, tobacco, cigars and cigarettes, and also large quantities of provisions.

#### TRADE WITH VARIOUS COUNTRIES.

The trade of the State with the United Kingdom is greater than with any other country. It must be remembered, however, that the real trade with the United Kingdom is not shown, because on the one side foreign goods are sent to Australia through London, and on the other a large portion of the exports from New South Wales to Victoria and South Australia is eventually shipped to the United Kingdom. The following statement shows the total trade of New South Wales during 1907 with the principal countries :—

Country.	Imports.	Exports.	Total Trade.
	£	£	£
Australian States ... ..	18,595,804	15,880,905	34,476,709
United Kingdom ... ..	12,474,736	13,687,977	26,162,713
British Possessions—			
Canada ... ..	200,173	105,893	306,066
Hong Kong ... ..	117,046	482,219	599,265
India and Ceylon ... ..	1,059,919	1,131,781	2,191,700
New Zealand ... ..	1,604,868	1,480,461	3,085,329
South Africa ... ..	6,374	430,869	437,243
Straits Settlements ... ..	119,167	218,866	338,033
Others ... ..	201,299	405,522	606,811
	34,379,376	33,824,493	68,203,869
Foreign Countries—			
Belgium ... ..	504,268	3,531,502	4,035,770
China ... ..	39,188	217,368	256,556
France ... ..	146,717	4,475,962	4,622,679
Germany ... ..	1,199,415	3,685,469	4,884,884
Italy ... ..	121,294	145,211	266,505
Japan ... ..	235,179	486,083	721,262
New Caledonia ... ..	43,071	114,918	157,989
Philippine Islands ... ..	30,357	311,301	341,658
South Sea Islands ... ..	145,836	140,262	286,098
United States ... ..	2,335,409	811,942	3,147,351
Others ... ..	276,085	1,030,467	1,306,552
	5,076,819	14,950,485	20,027,304
Total ... ..	39,456,195	48,774,978	88,231,173

The statement represents the direct trade with the countries specified, irrespective of whence the goods originally came or where they ultimately went. It is impossible to trace the exports to their ultimate destination, but, so far as the imports are concerned, the Customs Department records the countries of origin of the goods, that is to say, the countries where the goods were actually produced or manufactured. The next statement affords a comparison of the imports during 1907, according to the countries whence they were directly shipped, and according to the countries of origin. In each case the proportions of each to the total imports are attached :—

Country.	Direct Imports.	Origin of Imports.	Proportion per cent.	
			Direct Imports.	Origin of Imports.
	£	£		
Australian States ... ..	18,595,804	16,408,318	47·13	41·59
United Kingdom ... ..	12,474,736	11,308,264	31·62	28·66
British Possessions—				
Canada ... ..	200,173	170,115	0·50	0·43
Hong Kong ... ..	117,046	3,625	0·30	.....
India and Ceylon ... ..	1,059,919	1,155,661	2·69	2·93
New Zealand ... ..	1,604,868	1,544,188	4·07	3·91
Straits Settlements ... ..	119,167	72,543	0·30	0·19
Others ... ..	207,663	335,018	0·52	0·85
	34,379,376	30,997,732	87·13	78·56
Foreign Countries—				
Belgium ... ..	504,268	229,280	1·28	0·58
China ... ..	39,188	169,303	0·10	0·43
France ... ..	146,717	727,729	0·37	1·84
Germany ... ..	1,199,415	1,938,242	3·04	4·91
Italy ... ..	121,294	163,773	0·31	0·42
Japan ... ..	235,179	302,928	0·60	0·77
South Sea Islands ... ..	145,836	168,085	0·37	0·43
Switzerland ... ..	5,448	311,527	0·01	0·79
United States ... ..	2,335,409	3,458,355	5·92	8·77
Others ... ..	344,065	989,241	0·87	2·50
	5,076,819	8,458,463	12·87	21·44
Total ... ..	39,456,195	39,456,195	100·00	100·00

During the year Australian produce to the value of £20,513 was re-imported from outside the Commonwealth, and extra Australian produce to the value of £2,207,999 was re-imported from the other States. The table shows that there were fairly considerable differences in the case of the United Kingdom, Hongkong, Belgium, France, Germany, and the United States, and smaller differences in the case of all the countries, between the direct imports and those according to country of origin, and the differences would be larger still if it were not that the totals for countries of origin are increased on account

of goods re-imported from other States during the year. According to the direct imports about 32 per cent. of the total was received from the United Kingdom, 8 per cent. from British possessions, and 13 per cent. from foreign countries, whereas, in reality, the proportion of British goods imported was 29 per cent., and of foreign goods 21 per cent., the proportion of those the produce of British possessions being unaltered.

The table below shows in quinquennial periods since 1880, the volume of imports divided under the four heads, Australian States, the United Kingdom, British possessions, and Foreign countries :—

Period.	Imports from—				Total Imports.
	Australian States.	United Kingdom.	British Possessions.	Foreign Countries.	
	£	£	£	£	£
1880-84 ...	32,592,680	48,726,544	7,092,661	9,502,846	97,914,731
1885-89 ...	40,837,186	48,279,604	8,134,224	11,063,225	108,314,239
1890-94 ...	44,238,360	41,293,833	6,943,513	10,208,197	102,683,903
1895-99 ...	47,175,625	37,123,060	7,775,602	16,271,863	108,346,150
1900-04 ...	57,426,119	43,118,128	10,147,402	23,827,977	134,519,626
1905 ...	14,938,885	8,602,288	2,448,226	3,434,609	29,424,008
1906 ...	17,061,860	10,047,928	3,446,059	4,109,516	34,665,363
1907 ...	18,595,804	12,474,736	3,308,836	5,076,819	39,456,195

If these figures be stated as proportions of the total imports the following results are obtained :—

Period.	Australian States.	United Kingdom.	British Possessions.	Foreign Countries.	Total.
	%	%	%	%	%
1880-84 ...	33·29	49·76	7·24	9·71	100
1885-89 ...	37·70	44·57	7·51	10·22	100
1890-94 ...	43·08	40·22	6·76	9·94	100
1895-99 ...	43·54	34·26	7·18	15·02	100
1900-04 ...	42·69	32·06	7·54	17·71	100
1905 ...	50·77	29·24	8·32	11·67	100
1906 ...	49·22	28·99	9·94	11·85	100
1907 ...	47·13	31·62	8·38	12·87	100

The diversion of trade shown by the table is rather remarkable, but is probably more apparent than real. Twenty years ago the ships which now trade direct between Australia and Europe and America were either just beginning to run or were not running at all, and goods were sent to Australia through London to a greater extent than is now the case. So far as the proportions are concerned, the Australian States and the United Kingdom have practically changed places. Since 1880 the proportion of imports from British possessions has hardly varied, but of late years the proportion of imports from foreign countries has increased materially.

The next table shows the exports from New South Wales under the same heads and for the same periods as in the preceding tables, and a careful consideration of the figures will show that the changes in the exports have been very similar to those in the imports :—

Period.	Exports to—				Total Exports.
	Australian States.	United Kingdom.	British Possessions.	Foreign Countries.	
	£	£	£	£	£
1880-84 ... ..	37,167,523	39,964,529	5,449,726	5,925,747	88,507,525
1885-89 ... ..	42,083,242	37,727,437	4,508,809	10,885,370	95,204,858
1890-94 ... ..	47,766,714	39,358,695	4,742,725	21,592,966	113,461,100
1895-99 ... ..	39,862,835	43,203,489	6,137,642	35,585,823	124,789,789
1900-04 ... ..	44,483,581	40,732,026	14,441,877	39,224,800	138,882,284
1905 ... ..	12,263,472	10,222,422	3,533,673	10,762,439	36,782,006
1906 ... ..	14,651,156	12,174,155	4,925,904	13,886,829	45,638,044
1907 ... ..	15,880,905	13,687,977	4,255,611	14,950,485	48,774,978

Proportion per cent.

1880-84 ... ..	41·99	45·15	6·16	6·70	100
1885-89 ... ..	44·20	39·63	4·74	11·43	100
1890-94 ... ..	42·10	34·69	4·18	19·03	100
1895-99 ... ..	31·94	34·62	4·92	28·52	100
1900-04 ... ..	32·03	29·33	10·40	28·24	100
1905 ... ..	33·34	27·79	9·61	29·26	100
1906 ... ..	32·10	26·68	10·79	30·43	100
1907 ... ..	32·56	28·06	8·73	30·65	100

\* The exports show a similar tendency to the imports. Both absolutely and relatively the exports to foreign countries have increased constantly; in fact the proportion of goods now sent to the United Kingdom and foreign countries hardly differs. The reason is similar to that given regarding the imports, namely, the opening up of direct communication with the various countries, and also to the fact that gold is now shipped direct to those countries on account of the United Kingdom. The exports to British possessions more than doubled during the last eight years, and at first sight this might seem curious, but the explanation is that there have been heavy shipments of gold and silver to India and Ceylon.

TRADE WITH AUSTRALIAN STATES.

It has already been stated that the records of Interstate trade are to a certain extent misleading. The outward Interstate transfers in particular are now worth very little. In 1904 records of outward Interstate transfers were abolished, and the only manner in which the exports from any State to the other States can now be obtained, is by the reverse method of taking the imports into the other States as the exports from that State. Consequently the values of the Interstate imports and exports are identical, and do not take into account freight, insurance, &c. The export values are therefore too high, the average excess being perhaps as much as 10 or 15 per cent. Moreover, such movements as those of live stock between New South Wales and Queensland and South Australia are reckoned as trade, and again both the imports and exports are increased by including goods which pass through the State and are subsequently shipped to countries outside

Australia, chiefly to the United Kingdom. Altogether, of the total Interstate trade, considerably more than one-half is only nominal. However, taking the figures for what they are worth, the following table shows the total value of the imports from and exports to each State into and from New South Wales at intervals since 1870:—

State.	1870.	1880.	1890.	1900.	1907.
IMPORTS.					
From—	£	£	£	£	£
Victoria ... ..	1,153,695	2,187,119	2,097,259	3,396,782	5,561,300
Queensland ... ..	1,767,974	2,224,421	5,482,452	4,631,384	7,007,582
South Australia ... ..	366,480	690,407	2,036,492	1,439,528	4,080,939
Western Australia ... ..	144	.....	830	147,908	528,955
Tasmania ... ..	90,827	383,106	432,615	548,478	1,417,028
Total ... ..	3,379,120	5,485,053	10,049,648	10,164,080	18,595,804
EXPORTS.					
To—	£	£	£	£	£
Victoria ... ..	2,583,552	4,578,867	5,386,553	3,977,828	6,668,888
Queensland ... ..	680,301	1,362,262	1,670,465	1,918,903	3,423,537
South Australia ... ..	350,247	830,256	3,700,124	3,259,530	4,626,205
Western Australia ... ..	.....	1,104	17,811	445,974	675,468
Tasmania ... ..	26,555	81,484	215,674	376,979	486,807
Total ... ..	3,640,655	6,853,973	10,990,627	9,979,214	15,880,905

The trade between New South Wales and the other States has increased constantly since 1870, and shows special expansion between 1880 and 1890, owing to the opening up of the Broken Hill silver mines about 1884. Practically the whole of the trade of Broken Hill passes through South Australia, and increases the volume of trade credited to that State. South Australia also receives credit for large quantities of wool sent from the Western districts of New South Wales for transshipment oversea. The decline after 1890 was due to the fact that the pastoral industry was affected by unfavourable seasons and lower prices, and the trade of Broken Hill also by lower prices for its minerals. The largest trade of all the States is with Victoria, although Queensland is not far behind. A great part of the Riverina and south-western districts of the State trades almost exclusively with Melbourne. Included in the Queensland, West Australian, and Tasmanian figures is gold sent to Sydney for coinage, while movements of live stock are included in all the States—Queensland being most largely affected in each case. There are also included the re-exports of British and foreign produce from State to State.

The chief value of the Interstate records now is to show how the trade of the State has been affected by Federation, as since 1901 the old State tariffs have been abolished, and trade between all the States is free. The New South Wales markets were practically free to the other States before Federation. The following statement shows for each of the years 1905, 1906, and 1907 the value of the imports of Australian produce from the other States into New South Wales, and the value of New South Wales produce exported to the other States.

The articles exchanged between New South Wales and the other States are many, and only those are shown in the statement which were probably intended for consumption. The export figures are partly estimated for reasons already explained.

Article.	Australian Produce imported from other Australian States.			New South Wales Produce exported to other Australian States.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Butter ... ..	203,588	121,308	125,220	93,931	48,659	132,534
Cheese ... ..	17,817	8,763	22,003	8,863	10,751	5,421
Eggs ... ..	36,250	38,170	48,874	2,041	1,721	856
Fish—all kinds ... ..	11,305	8,093	14,457	3,721	3,951	5,407
Meats—						
Bacon and ham ... ..	86,250	91,086	96,942	24,527	13,131	8,253
Frozen beef ... ..	1,498	183	11,197	1,590	793	125
„ mutton ... ..		1,591		39,734	75,035	73,360
Extract of ... ..	9,237	890	7,997	406	252	36
Preserved ... ..	44,524	28,496	40,221	71,170	70,422	61,164
Milk—						
Preserved & Concentrated	11,066	17,746	28,218	3,357	3,786	6,297
Biscuits ... ..	10,544	12,414	11,981	39,045	51,576	60,833
Confectionery ... ..	35,265	63,275	66,170	9,972	15,705	19,583
Fruits—dried ... ..	54,985	59,229	98,499	1,408	1,443	1,888
fresh ... ..	319,258	199,490	232,375	97,394	99,282	103,546
Vegetables—fresh ... ..	50,714	66,537	51,366	6,025	9,924	8,777
Grain—Maize ... ..	68,736	117,194	117,901	7,373	8,056	3,564
Oats ... ..	84,450	77,051	112,018	1,937	2,473	2,092
Grain, prepared—						
Flour ... ..	64,912	90,609	121,238	130,005	176,307	188,168
Malt ... ..	57,170	76,156	105,775	49	866	155
Bran, pollard, and sharps..	21,550	16,718	25,701	30,899	33,179	32,489
Hay and chaff ... ..	139,667	226,608	337,627	8,161	7,609	5,169
Jams and jellies ... ..	54,862	54,742	57,611	34,871	57,724	34,702
Linseed cake ... ..	121	67	109	11,872	9,663	10,153
Onions ... ..	46,620	42,223	35,287	2,326	2,660	1,379
Potatoes ... ..	331,720	298,926	196,991	33,418	34,650	32,695
Sugar ... ..	618,075	860,284	783,854	.....	.....	.....
Ale and beer ... ..	21,478	20,650	26,692	6,026	7,987	16,286
Spirits—Brandy ... ..	16,249	18,443	27,332	.....	.....	.....
Wine, Fermented, N.E.I. ...	35,656	41,026	44,284	8,835	7,683	13,236
Aerated waters ... ..	4,193	3,292	2,668	9,710	9,297	9,770
Tobacco—Manufactured ...	68,841	62,701	69,015	93,300	115,519	125,318
Cigarettes ... ..	9,615	13,222	14,839	75,384	71,298	87,020
Cigars ... ..	22,482	20,254	20,904	3,312	3,285	2,409
Hops ... ..	16,215	18,511	23,245	.....	.....	.....
Pickles ... ..	7,205	7,443	9,204	7,924	8,384	10,878
Salt ... ..	34,923	40,188	55,861	.....	.....	.....
Blankets ... ..	25,854	38,976	46,148	2,397	2,386	2,060
Woollens ... ..	38,890	40,140	55,733	5,912	8,511	8,509
Apparel and attire ... ..	257,432	264,801	338,347	90,893	111,282	134,134
Umbrellas, parasols ... ..	6,524	5,633	9,304	9,355	8,698	10,687
Boots and shoes ... ..	175,845	172,579	234,905	105,509	116,226	134,428
Hats and caps ... ..	37,627	49,856	62,043	23,810	27,878	35,705
Cordage, fibrous ... ..	27,303	28,532	29,743	14,492	14,150	14,207
Books ... ..	12,580	13,822	12,442	14,799	10,246	15,521
Paper ... ..	11,876	13,996	17,217	19,808	16,316	17,518
Stationery ... ..	48,759	56,050	63,364	24,335	26,894	32,196
Pianos... ..	2,662	2,015	4,627	37,884	38,095	57,900

Article.	Australian Produce imported from other Australian States.			New South Wales Produce exported to other Australian States.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Jewellery ... ..	73,894	88,941	110,604	30,537	38,724	36,593
Machines and Machinery ... ..	60,437	102,331	178,693	36,009	48,404	61,080
Agricultural imple-ments ... ..	62,748	62,340	71,571	2,593	2,588	3,894
Harvesters ... ..	72,583	78,008	20,921	.....	.....	.....
Metal manufactures—						
Bolts, nuts, &c. ... ..	4,468	7,290	8,485	229	455	1,048
Nails ... ..	9,364	9,585	13,206	235	1,374	3,407
Wire (barbed) ... ..	5,520	7,077	8,480	167	69	406
Wire-netting ... ..	849	1,522	136	10,360	12,582	17,073
Other ... ..	52,883	67,486	86,239	38,613	54,747	67,747
Leather manufactures	11,122	18,892	18,885	8,082	12,900	14,209
Bicycles ... ..	8,898	12,123	10,042	956	1,334	2,228
Cement ... ..	1,115	7,034	6,440	32,443	33,856	54,234
Tiles ... ..	5,710	7,582	6,988	1,228	1,213	9,561
Timber—building ... ..	20,873	18,009	17,694	1,360	2,527	5,285
Furniture ... ..	26,324	28,054	43,190	12,261	12,383	16,675
Arms, ammunition ... ..	8,862	19,603	28,505	477	261	404
Drugs and chemicals	18,094	18,041	22,534	18,334	24,004	28,906
Medicines ... ..	20,235	22,288	27,253	88,735	107,711	124,690
Blue ... ..	1,500	3,022	3,649	10,463	11,063	10,621
Glassware, bottles, &c.	12,620	11,345	14,590	4,059	6,200	9,701
Candles ... ..	10,229	17,284	22,225	14,116	13,759	32,988
Blacking ... ..	4,613	4,749	4,582	1,454	1,601	2,414
Matches and vestas ... ..	6,693	10,909	13,735	4	.....	.....
Soap, N.E.L. ... ..	23,153	33,695	33,566	41,259	46,239	49,693
Wicker and wood manufactures	14,825	13,505	12,390	8,568	8,053	12,994
Starch ... ..	26,898	26,336	35,292	.....	.....	.....
India-rubber hose ... ..	31,257	45,341	53,241	3,043	5,968	5,415
Manures ... ..	8,781	8,908	17,169	12,142	29,880	27,988
Timber ... ..	68,935	75,575	110,794	24,729	36,438	27,826
Coal ... ..	494	1,017	1,533	772,851	891,446	970,765
All articles ... ..	13,356,420	15,292,881	16,387,805	9,648,845	11,595,097	12,493,033

There are not many articles where the balance of trade is in favour of this State; among the largest of the items are frozen mutton, preserved meats, biscuits, flour, tobacco, cigarettes, pianos, wire-netting, cement, medicines, soap, and coal. In a great many cases the excess of exports has increased, as in the case of frozen mutton, biscuits, flour, tobacco, cigarettes, pianos, medicines, cement, coal, and manures. On the other hand, apparel and attire, boots and shoes, jewellery, machines and machinery, timber, dried fruits, maize and malt show exceptionally large increases in the excess of imports.

## VICTORIA.

In comparison with the imports from Victoria the export list is a very meagre one, although there is a tendency towards improvement. In all the long list shown below of the articles exchanged between the two States there are only ten items under which New South Wales receives more from Victoria than she sends thereto, namely, butter, frozen mutton, bran, pollard and sharps, oranges and lemons, cigarettes, medicines, cement, tiles, candles, and coal. In the way of manufactured articles—such as apparel, woollens, boots, hats, jewellery, furniture, agricultural implements, &c., Victoria has all the advantage. With the exception of coal, the trade is overwhelmingly in favour of Victoria. As mentioned previously, however, a great portion of the southern districts of New South Wales is supplied from Victoria:—

Article.	Australian Produce imported from Victoria.			New South Wales Produce exported to Victoria.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Butter... ..	10,219	15,479	26,336	38,285	15,978	50,813
Cheese... ..	4,763	2,533	11,398	3,815	2,733	914
Fish—Oysters... ..	4	.....	.....	62	.....	.....
Meats—Bacon and ham... ..	6,579	17,264	24,841	5,208	3,377	1,418
Frozen mutton... ..	.....	67	.....	11,108	45,442	45,458
Milk, preserved... ..	4,137	6,183	13,376	435	393	1,445
Biscuits... ..	7,563	10,317	9,229	4,127	4,073	3,804
Confectionery... ..	30,238	57,582	58,757	1,570	3,268	5,291
Fruits, fresh—						
Apples... ..	2,066	789	2,440	6	53	6
Oranges and lemons... ..	122	87	257	56,785	53,656	56,572
Other... ..	27,458	33,178	55,295	896	1,246	1,319
Fruits, dried—						
Raisins... ..	23,607	15,333	20,380	.....	.....	.....
Sultanas... ..	8,791	15,432	29,356	.....	.....	.....
Vegetables, fresh... ..	8,186	15,730	6,462	4,021	7,719	5,964
Grain—						
Maize... ..	36,995	16,068	12,791	491	1,660	932
Oats... ..	48,587	41,420	37,918	289	416	380
Grain, prepared—						
Flour... ..	13,226	45,721	22,078	7,610	8,110	9,030
Malt... ..	46,987	68,086	95,196	25	823	92
Bran, pollard, and sharps... ..	4,773	4,166	5,715	2,324	3,481	9,544
Hay and chaff... ..	59,191	82,972	90,752	1,882	728	1,915
Jams and jellies... ..	27,027	27,522	30,934	10,413	20,714	6,942
Onions... ..	43,923	40,908	34,162	72	.....	.....
Potatoes... ..	32,991	58,685	15,369	120	1,206	.....
Sugar... ..	24,731	26,870	20,113	.....	.....	.....
Ale and beer... ..	10,093	9,719	11,301	1,912	1,729	1,815
Spirits—Brandy... ..	8,457	7,975	10,075	.....	.....	.....
Wine... ..	11,883	14,457	14,332	1,340	1,256	4,355
Tobacco—						
Manufactured... ..	54,944	48,036	55,838	21,651	23,696	26,400
Cigarettes... ..	5,820	8,418	7,175	37,267	29,346	34,743
Cigars... ..	19,481	19,134	19,352	172	352	224
Cocoa and chocolate... ..	5,517	6,537	7,261	47	32	158
Coffee and chicory... ..	1,760	3,211	4,555	20	348	229
Pickles... ..	4,675	4,425	5,289	42	130	205

Article.	Australian Produce imported from Victoria.			New South Wales Produce exported to Victoria.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Blankets ... ..	24,116	34,691	36,438	257	.....	.....
Woollens ... ..	37,619	39,023	53,816	771	2,377	3,142
Apparel and attire ... ..	198,737	198,895	253,660	13,200	20,848	26,797
Umbrellas ... ..	5,927	5,229	8,744	521	182	387
Boots and shoes ... ..	137,973	135,870	188,003	14,996	16,861	21,546
Hats and caps ... ..	32,283	44,112	55,479	1,795	3,388	3,361
Cordage ... ..	23,108	22,845	24,975	11,900	2,397	465
Books ... ..	9,557	11,950	10,207	8,885	4,259	7,448
Paper ... ..	10,667	12,503	16,496	8,473	6,287	4,869
Stationery ... ..	42,587	48,922	54,590	5,807	6,634	7,716
Jewellery ... ..	51,851	56,531	75,469	6,037	78	3,630
Machines and machinery ... ..	43,259	56,189	105,022	9,241	10,088	12,069
Agricultural implements ... ..	47,219	49,036	62,079	1,443	1,228	1,587
Harvesters ... ..	70,452	74,041	19,074	.....	.....	.....
Metal manufactures—N.E.I. ... ..	38,053	51,665	65,570	9,400	12,444	17,420
Bolts and nuts ... ..	4,310	6,938	7,914	20	32	.....
Nails ... ..	8,767	8,833	11,720	21	72	.....
Leather manufactures ... ..	8,375	15,045	13,922	391	3,852	1,598
Bicycles ... ..	7,308	9,421	8,864	200	155	822
Cement ... ..	47	343	335	12,209	10,169	16,853
Tiles ... ..	5,597	7,413	6,880	837	937	9,310
Furniture ... ..	14,364	15,500	20,479	3,172	3,657	6,701
Arms and ammunition ... ..	8,614	19,174	28,163	171	.....	.....
Drugs and chemicals ... ..	10,262	11,638	12,012	6,619	8,247	11,255
Medicines ... ..	15,213	17,944	20,778	35,335	43,622	43,084
Blue ... ..	1,455	2,913	3,521	1,923	2,556	1,615
Glassware, bottles, &c. ... ..	11,404	10,186	13,316	520	247	3,461
Candles ... ..	3,141	5,506	6,852	10,205	8,900	8,348
Blacking ... ..	4,124	4,364	4,243	308	327	615
Matches and vestas ... ..	6,668	10,861	13,470	.....	.....	.....
Soap, N.E.I. ... ..	10,970	15,705	20,235	10,469	14,202	14,413
Manures ... ..	8,409	8,474	14,435	698	3,005	1,136
India-rubber hose ... ..	28,077	36,956	38,795	1,304	3,281	2,369
Starch ... ..	26,094	25,510	34,205	.....	.....	.....
Coal ... ..	34	41	.....	387,045	467,126	488,925

## QUEENSLAND.

The imports from Queensland consist chiefly of meats, butter, sugar, maize, bananas, pine-apples, and timber, all more or less raw produce. During the three years there has been a great increase in the export trade with Queensland, chiefly in manufactured articles, biscuits, flour, tobacco, cigarettes, apparel, boots, hats, machinery, metal manufactures and others. Coal is also

exported largely. On the whole the balance of trade is in favour of New South Wales:—

Article.	Australian Produce Imported from Queensland.			New South Wales Produce Exported to Queensland.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Butter...	138,963	57,630	38,490	456	433	837
Cheese	9,144	3,602	4,023	133	2,069	1,004
Eggs	7,102	4,196	6,573	77	.....	.....
Fish—Fresh oysters	5,910	3,823	7,380	.....	.....	.....
Meats—						
Bacon and ham	72,050	63,860	53,479	802	700	1,440
Frozen beef	1,467	.....	11,045	.....	.....	.....
Extract of	9,133	744	7,813	105	57	9
Preserved	42,448	26,566	37,770	3,206	4,525	6,816
Arrowroot	3,705	2,263	3,366	.....	.....	.....
Biscuits	1,726	743	277	19,021	22,545	29,378
Fruit, fresh—						
Bananas	82,703	22,280	21,896	.....	.....	.....
Pine-apples	17,359	18,294	20,684	.....	.....	.....
Apples	149	47	66	16,550	13,506	16,196
Oranges and lemons	1,592	2,116	2,393	7,097	4,669	7,309
Other	5,342	7,394	7,594	9,139	13,498	13,081
Vegetables, fresh	15,665	25,267	15,028	1,534	1,517	2,005
Grain—Maize	31,539	100,851	105,108	6,293	5,186	985
Grain, prepared—						
Flour	1,591	.....	28	121,437	165,647	176,297
Oatmeal	7	.....	29	7,760	7,664	7,898
Hay and chaff	3,062	2,932	1,046	5,744	6,606	3,030
Jams and jellies	2,536	4,202	2,801	17,147	23,004	20,514
Potatoes	1,085	3,159	200	32,586	31,983	31,964
Sugar	564,064	807,145	736,746	.....	.....	.....
Aerated waters	2,648	1,957	1,647	7,654	7,139	7,687
Tobacco—						
Manufactured	1,294	938	869	48,620	53,548	55,928
Cigarettes	176	68	.....	13,921	15,308	20,188
Apparel and attire	30,793	36,171	46,106	50,029	64,705	76,104
Umbrellas	286	137	167	6,177	6,360	9,548
Boots and shoes	2,539	2,016	3,944	76,459	73,345	91,495
Hats and caps	2,385	1,989	2,269	15,308	17,906	23,266
Stationery	2,420	2,283	2,821	11,420	11,824	16,134
Jewellery	9,929	13,388	14,095	8,142	12,064	11,628
Machines and machinery	4,034	3,063	8,825	19,199	27,940	34,189
Agricultural Implements—						
Harvesters.	.....	120	.....	.....	.....	.....
Metal Manufactures—N.E.I.	6,787	6,398	6,044	16,949	28,387	38,312
Wire-netting	3	204	106	8,667	8,404	9,399
Leather manufactures	687	1,494	1,283	5,362	6,668	8,605
Cement	6	5	7	14,784	17,139	24,734
Timber—building	17,663	16,097	14,010	676	763	1,324
Drugs and chemicals	191	960	232	7,368	8,838	11,542
Medicines	632	572	910	22,245	25,790	32,755
Blue	.....	.....	.....	3,131	3,318	3,894
Soap, N.E.I.	1,152	436	.....	9,039	9,704	10,718
Timber	42,663	41,144	38,365	2,722	4,668	8,379
Manures	357	.....	2,208	900	2,761	1,582
Coal	426	945	1,474	13,470	24,487	31,313

#### SOUTH AUSTRALIA.

The trade with South Australia is somewhat similar to that carried on with Victoria, owing to the fact that Broken Hill is almost entirely supplied by it. The Barrier trade is a great advantage to South Australia, as Broken Hill, with its population of 32,000, is commercially a part of that State.

There are very few articles where there is an excess of exports to South Australia, the principal being biscuits, cigarettes, pianos, medicines, manures, and coal. In practically all the other important items the balance is in favour of South Australia.

Article.	Australian Produce Imported from South Australia.			New South Wales Produce Exported to South Australia.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Butter... ..	54,010	48,098	60,219	16,366	4,907	4,997
Eggs ... ..	29,108	33,531	41,806	10	.....	.....
Meats—Bacon and ham ...	7,558	9,936	18,600	1,582	598	354
Biscuits ... ..	1,233	1,340	2,442	7,538	14,703	15,947
Fruits, fresh—						
Bananas ... ..	3,402	2,696	3,292	.....	.....	.....
Pine-apples ... ..	65	.....	.....	.....	.....	.....
Apples ... ..	4,352	5,271	5,608	104	81	139
Oranges and lemons ...	5,517	5,555	7,152	90	2,262	96
Other ... ..	13,128	8,025	15,485	337	414	389
Fruits, dried—						
Currants ... ..	3,605	2,565	6,279	.....	.....	.....
Raisins ... ..	3,641	8,786	15,841	.....	.....	.....
Sultanas ... ..	414	2,137	4,066	.....	.....	.....
Vegetables ... ..	19,064	20,968	24,846	.....	.....	.....
Grain, prepared—						
Flour ... ..	49,832	44,755	98,668	724	942	1,124
Malt ... ..	8,191	7,048	10,497	.....	.....	.....
Bran, pollard, and sharps.	14,236	12,445	19,165	3,245	531	782
Hay and chaff ... ..	76,798	140,583	225,025	6	.....	.....
Jams and jellies ... ..	8,611	10,315	8,568	253	431	514
Potatoes ... ..	16,104	13,431	7,845	599	1,178	588
Spirits—Brandy ... ..	7,669	10,402	17,177	.....	.....	.....
Wine ... ..	23,400	26,098	.....	1,512	1,842	2,041
Tobacco—						
Manufactured ... ..	12,600	13,611	12,228	8,194	17,469	18,156
Cigarettes ... ..	3,619	4,736	7,574	13,263	15,705	19,186
Cigars ... ..	2,976	1,028	1,420	330	68	100
Salt ... ..	30,896	36,425	46,821	.....	.....	.....
Apparel and attire ... ..	27,369	28,439	36,393	12,452	12,901	16,534
Boots and shoes ... ..	34,593	34,317	42,703	3,297	5,450	6,510
Pianos ... ..	1,943	1,698	3,586	10,580	8,814	12,484
Jewellery ... ..	8,188	17,455	19,627	14,109	24,039	19,484
Machines and machinery ...	12,579	42,291	63,521	3,358	4,974	8,484
Agricultural implements ...	15,120	12,981	8,833	108	8	279
Harvesters ... ..	2,131	3,847	1,847	.....	.....	.....
Metal manufactures—N.E.I.	14,366	18,293	4,951	3,250	5,215	5,601
Wire-netting ... ..	85	232	.....	165	7	107
Furniture ... ..	9,995	11,140	19,272	764	896	1,608
Drugs and chemicals ... ..	7,062	4,436	9,555	1,387	1,736	2,451
Medicines ... ..	4,117	3,766	5,534	15,466	20,640	24,589
Blue ... ..	45	97	128	2,988	2,903	3,124
Candles ... ..	6,990	11,705	15,351	258	24	6
Soap, N.E.I. ... ..	11,019	17,510	13,224	4,505	4,928	5,138
Timber ... ..	8,552	11,453	31,483	2,188	4,364	3,520
Manures ... ..	15	148	210	100	11,216	12,230
Coal ... ..	34	31	.....	256,448	281,039	342,549

## WESTERN AUSTRALIA.

The import trade with Western Australia is practically nil, while the export trade has increased and is fairly valuable. The goods exported comprise principally coal, provisions, tobacco, apparel, pianos, and metal manufactures. Interstate trade with Western Australia has been absolutely free since 8th October, 1906. Prior to that date, under the Federal Constitution

Act, Western Australia could collect special duties on goods not originally imported from beyond the Commonwealth.

Article.	Australian Produce imported from Western Australia.			New South Wales Produce exported to Western Australia.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Butter...	24,856	11,772	63,834			
Meats—Bacon and ham	8,798	2,485	1,265			
Frozen mutton	28,542	29,506	27,836			
Preserved	55,482	53,405	42,478			
Bran, pollard, and sharps	14,758	14,091	11,086			
Jams and jellies	3,785	6,286	4,192			
Linseed cake	5,144	3,606	3,435			
Tobacco—Manufactured	14,502	20,074	24,388			
Cigarettes	10,790	10,575	11,041			
Apparel and attire	9,751	9,500	9,363			
Pianos	10,299	10,461	10,666			
Machines and machinery	2,704	3,414	3,506			
Metal Manufactures—N.E.I.	5,645	6,566	6,673			
Wire-netting	228	2,823	4,771			
Drugs and Chemicals	1,804	2,865	1,923			
Medicines	10,994	12,411	17,864			
Soap, N.E.I.	13,216	12,556	1,546			
Manures	5,390	7,867	6,718			
Coal	92,038	85,098	69,129			

## TASMANIA.

The principal articles imported from Tasmania are agricultural products in the shape of apples, potatoes, and other vegetables, oats, hay and chaff, hops, and timber, while there is also a good market for Tasmanian ale and jams. The exports are chiefly manufactured goods, apparel, boots, metal manufactures, medicines, soap, butter, biscuits, and coal.

Article	Australian Produce imported from Tasmania.			New South Wales Produce exported to Tasmania.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£	£	£	£
Butter...	396	2,525	175	13,968	15,569	12,053
Meats—Bacon and ham	63	26	22	8,657	5,971	3,776
Biscuits	22	14	33	7,048	8,923	8,612
Fruits, fresh—						
Apples	100,710	74,630	72,893	.....	.....	.....
Oranges and lemons	8	.....	3	4,651	5,710	4,678
Other	54,959	18,710	16,950	793	1,682	1,389
Vegetables	7,799	4,574	5,030	450	640	733
Grain—Oats	31,500	33,087	70,698	22	112	.....
Flour	263	.....	464	79	148	.....
Jams and jellies	16,688	12,691	15,308	3,273	7,289	2,540
Potatoes	281,540	223,651	173,577	13	.....	.....
Hay and chaff	616	121	11,485	372	.....	.....
Ale and beer	7,386	5,257	4,257	304	51	3
Hops	14,028	15,460	19,398	.....	.....	.....
Apparel and attire	515	1,225	1,713	5,513	3,176	4,923
Boots and shoes	43	339	207	6,880	7,859	6,882
Pianos	310	.....	.....	3,023	1,718	2,623
Metal Manufactures—N.E.I.	197	159	287	4,517	4,530	6,183
Wire-netting	.....	.....	.....	746	599	866
Cement	.....	.....	.....	2,727	3,245	3,779
Drugs and chemicals	313	250	473	1,157	1,878	1,125
Medicines	268	2	20	4,694	5,248	6,397
Blue	.....	.....	.....	448	442	536
Soap, N.E.I.	.....	44	.....	4,030	4,759	873
Manures	.....	.....	.....	5,054	5,031	6,316
Timber	4,205	2,746	17,744	463	417	1,261
Coal	.....	.....	.....	23,850	33,696	38,849

## TRADE WITH THE UNITED KINGDOM.

As previous tables show, the direct trade with the United Kingdom is decreasing. As already pointed out the development of facilities for communication has caused a great increase in trade with the British possessions and with foreign countries.

A classification of the principal articles imported into the State from the United Kingdom during the year 1907 is given below :—

Article.	Value.	Article.	Value.
	£		£
Ale and beer ... ..	126,818	Floor cloths and coverings ...	129,646
Apparel and soft goods—		Glass and glassware ... ..	60,130
Apparel and attire, N.E.I. ...	834,042	Hats and caps ... ..	183,871
Cosies, cushions, &c. ...	75,807	India-rubber manufactures ...	61,059
Curtains ... ..	28,685	Jewellery and precious stones	213,315
Frillings, &c. ... ..	4,446	Leather ... ..	117,754
Gloves ... ..	72,063	Manures ... ..	367
Piece goods ... ..	2,876,194	Medicines ... ..	75,034
Sewing silks, &c. ... ..	153,014	Metals and Machinery—	
Trimmings, &c. ... ..	97,769	Implements, &c., agricul-	
Arms, ammunition, and ex-		tural ... ..	24,152
plosives ... ..	125,625	Iron and steel ... ..	728,414
Blankets and blanketing ...	22,265	Machines and machinery ...	757,120
Books (printed), music, &c. ...	139,716	Machine tools ... ..	52,025
Boots and shoes ... ..	97,791	Metals, manufactures of ...	982,493
Brushware (toilet and other) ...	49,388	Rails, &c., for Railways ...	169,481
Carpets and carpeting ... ..	53,829	Oils ... ..	80,172
Cocoa and chocolate (ground) ...	61,264	Paints and colours ... ..	125,788
Confectionery ... ..	50,865	Paper ... ..	272,058
Cordage and Twines—		Spirits ... ..	382,111
Metal ... ..	44,410	Stationery ... ..	104,348
Other ... ..	49,905	Tools of trade ... ..	96,093
Cutlery, N.E.I. ... ..	59,136	Vehicles ... ..	194,587
Drugs and chemicals ... ..	101,225	Watches, clocks, &c. ... ..	61,117
Earthenware, &c. ... ..	63,214		
Electrical materials ... ..	75,405		
Fancy goods ... ..	80,570		
Fish (preserved) ... ..	51,449	Total, all Imports from United Kingdom.	12,474,736

The largest market for the surplus products of New South Wales is found in the United Kingdom, which takes more than one-third of the export to overseas countries. The value of the principal articles exported during 1907 was as follows :—

Article.	Value.	Article.	Value.
	£		£
Butter ... ..	719,735	Leather ... ..	200,295
Copper ... ..	610,798	Meats ... ..	832,550
Gold ... ..	350,236	Skins and hides ... ..	461,612
Silver and lead ... ..	656,097	Tallow ... ..	486,301
Tin ... ..	301,403	Wool ... ..	4,963,067
Wheat ... ..	766,539		
Flour ... ..	6,368	Total, all Exports to United Kingdom.	10,637,832

## TRADE WITH BRITISH POSSESSIONS.

The following table shows the imports into New South Wales from the chief British possessions at decennial periods since 1870, and also for the year 1907 :—

Possession.	1870.	1880.	1890.	1900.	1907.
	£	£	£	£	£
Canada .. .. .	1,726	17,530	18,784	114,321	200,173
Cape Colony .. .		5	55	943	3,351
Ceylon .. .. .	210,114	13,068	43,702	213,195	353,449
Fiji .. .. .		54,135	99,853	60,831	97,373
Hongkong .. .	48,808	228,526	271,730	67,923	117,046
India .. .. .	2,567	653	195,368	388,546	706,470
Mauritius .. .	325,680	707,107	5,059	76,779	14,722
Natal .. .. .				70	3,023
New Zealand ..	298,951	460,735	932,073	1,348,605	1,604,868
Straits Settlements		16,045	27,148	40,391	119,167
Other .. .. .	60	1,665	1,626	42,150	89,194
Total .. .. .	£ 887,906	1,000,969	1,595,398	2,353,759	3,308,836

As the table shows, imports from New Zealand, India and Ceylon, Canada, and Hongkong amounted in 1907 to £2,982,006, or about 90 per cent. of the total from all British possessions.

New Zealand gave promise at a former period of being one of the leading customers of this State; but from various causes both the imports and the exports fell away very considerably. The export trade in commodities shows but little sign of recovery, while the value of the imports fluctuates with the character of the season in New South Wales, a bad year being always attended with large importations of New Zealand oats and other produce. Although 1907 shows an increase, it was almost entirely due to larger shipments of gold for coinage.

Hongkong commercially is a port of China, and no inconsiderable portion of the trade of that Empire with New South Wales is transacted *via* that port. The Indian trade has grown up almost entirely since 1880, but it fluctuates largely owing to the variable exports of gold specie. The Fiji Island trade is valuable, but, like the trade with other colonial possessions, is rather unsteady.

From New Zealand, the imports comprised gold, £1,008,643; New Zealand pine, £244,243; hides, £66,615; flax, £42,673; and malt and hops, £8,109.

Amongst the chief imports from India were bags and sacks, £420,083; tea, £111,346; canvas, £74,312; and castor oil, £19,951. From Ceylon, tea to the value of £338,292 was imported during the year. The Indian and Ceylon teas have quite overmastered the Chinese article in the public estimation; the imports of the latter having decreased from £217,402 in 1890 to £30,682 in 1907, while the value of Indian and Ceylon teas, imported during the same period, advanced from £43,317 to £449,638.

The chief articles imported from Fiji were copra, the value of which in 1907 amounted to £8,081; sugar, £30,310; and bananas, £51,376. Trade in bananas and sugar, which were formerly large items, has been greatly restricted by the Federal tariff. Bananas, however, during the last two years have recovered greatly.

Prior to 1893 there was a fair import trade in lumber with Canada, but the establishment of a direct line of steamers between Sydney and Vancouver in that year had the effect of increasing the number of articles imported, and of laying the foundation of an export trade, which until that time was practically non-existent. The chief imports in 1907 were machines and machinery, £45,167; medicines, £15,213; agricultural implements, £14,182; preserved fish, £13,410; and timber, £13,348.

Hongkong furnished rice to the value of £25,843; tea, £20,449; and China oil, £13,147.

Amongst the chief imports from other possessions may be mentioned sugar from Mauritius, valued at £14,722; and manures (rock phosphates) from Ocean Island, £20,451.

The chief imports from the Straits Settlements comprised pepper and other spices, £12,975; tapioca, £22,534; and rice, £29,955.

The exports from New South Wales to the chief British possessions at the same periods were as shown below:—

Possession.	1870.	1880.	1890.	1900.	1907.
	£	£	£	£	£
Canada .. .. .	....	....	10	66,403	105,893
Cape Colony .. .. .	....	712	1,014	600,233	235,640
Ceylon .. .. .	1,258,313	1,781	4,080	58,402	377,009
Fiji .. .. .	....	120,518	98,951	183,579	318,171
Hongkong .. .. .	51,651	137,577	255,050	218,986	482,219
India .. .. .	11,176	19,611	253,280	115,894	754,772
Mauritius .. .. .	73,307	14,999	25,815	8,613	3,601
Natal .. .. .	....	....	....	155,254	195,229
New Zealand .. .. .	197,025	525,174	294,113	826,662	1,430,461
Straits Settlements .. .. .	2,421	5,392	34,347	39,898	218,896
Other .. .. .	....	2,915	1,654	40,973	83,750
Total .. .. .	£ 1,594,393 .	828,679	968,314	2,314,897	4,255,611

From the above table it will be seen that the bulk of the exports is taken by New Zealand, India, and Hongkong, in the order named, these three possessions receiving nearly two-thirds of the total exports to all British possessions in 1907.

The chief exports to India were gold bullion, £325,203; gold specie, £195,000; horses, £20,255; copper ingots, £74,796; timber, rough, £77,104; and coal, £23,788. Ceylon received in 1907 gold specie to the amount of £300,000.

Amongst the principal exports to Cape Colony were undressed timber, £18,458; frozen mutton, £18,479; butter, £5,033; and leather, £58,033.

Shipments for 1907 to Hongkong included flour, £83,916; coal, £26,572; pig lead, £73,586; and gold specie, £254,123.

New Zealand received gold specie to the amount of £405,000; undressed timber, £103,685; coal, £103,704; manures, £52,751; and soap, £20,152. Articles re-exported to New Zealand were machinery, £34,064; tea, £43,518; apparel, £5,865; and piece-goods, £39,343.

Amongst exports to other British possessions may be mentioned the following, which were despatched to Natal during 1907—butter, £1,173; frozen mutton, £99,485. The trade with South Africa, which assumed considerable proportions during the war, fell away largely in 1903, nevertheless the accessibility of its markets makes the possession a convenient outlet for Australia's exportable surplus of forage and foodstuffs.

#### TRADE WITH FOREIGN COUNTRIES.

The total value of the trade of the State with countries other than those under British dominion is appreciably increasing.

Every year steamers of greater tonnage and higher speed are visiting the Commonwealth of Australia from Europe, and a considerable expansion of commerce must of necessity take place, owing to the new outlets for trade which have been opened up thereby. The values of the imports into New

South Wales from the principal foreign countries during the period 1870-1907 were as shown below :—

Country.	1870.	1880.	1890.	1900.	1907.
	£	£	£	£	£
Belgium .. .. .	....	....	130,819	147,661	504,268
France and New Caledonia ..	66,119	160,348	201,791	298,593	189,788
Germany .. .. .	....	47,169	639,475	1,105,064	1,199,415
Netherlands and Java .. ..	71,865	136,640	122,342	103,493	113,013
Norway .. .. .	....	....	20,891	77,596	43,043
Italy .. .. .	....	....	23,961	92,732	121,238
Sweden .. .. .	....	....	9,852	31,801	32,623
China .. .. .	258,412	358,129	241,840	190,456	39,188
Japan .. .. .	....	5,419	22,040	122,041	235,179
South Sea Islands .. ..	13,024	42,789	40,214	107,488	145,836
United States .. .. .	154,799	387,056	859,102	2,557,961	2,335,409
Other Foreign Countries ..	252,927	16,730	29,624	284,629	117,819
Total .. .. .	£ 816,646	1,154,280	2,341,951	5,120,115	5,076,819

As the table shows, the imports from the United States amounted, in 1907, to £2,335,409, or nearly half the total imports from all foreign countries. Next in order comes Germany with £1,199,415 followed by Belgium with £504,268, Japan with £235,179, and France with £146,717.

At one time the United States was the largest foreign market of this State, the value of exports thereto far exceeding those sent to any other foreign country; but the direct shipments of wool to the Continent of Europe, which are steadily increasing, have placed it below France, Germany, and Belgium, although the large shipments of gold in several years may seem to indicate otherwise. The import trade, however, is still greater than that transacted direct with the principal Continental countries, although the imports from Germany are rapidly growing, and it is to be remembered that some foreign products are sent to the State by way of Great Britain. Further, a large proportion of the imports from America is represented by breadstuffs, which vary according to the local production.

The direct trade between this State and Belgium began in 1881, and may, to a large extent, be attributed to the International Exhibition held in Sydney during 1879-80. In point of value the Belgian trade of the State is larger than that of any other foreign country, Germany and France excepted; but the port of Antwerp, which receives the bulk of the trade, is a distributing centre for a great part of the wool destined for French, German, and other Continental markets, and it is not possible to say much how of the goods shipped to Belgium are for local requirements.

A large trade has been maintained with Germany since 1879. Direct communication was established in 1887 by the North German Lloyd's Company, of Bremen, and further extended by a line of German cargo boats which commenced trading between Hamburg and Sydney in 1888. The trade has attained considerable dimensions, and now exceeds that with any other foreign country, although the customs returns may not always disclose this fact. The larger trade with the United States is, as has been shown, mainly due to shipments of gold.

The French trade has risen in importance since 1881, a result almost entirely due to the establishment of direct communication between this State and the Republic by the Messageries Maritimes Company, but it has been accompanied by a corresponding falling-off in the trade with New Caledonia, the chief dependency of France in the South Pacific. Thus, while in 1890 the total value of French imports and exports amounted to only £351,795, as against £4,622,679 in 1907, that of New Caledonia fell during the corresponding period from £277,309 to £157,989. As already pointed out, New Caledonia is an important market for the produce of the State, though its value has been affected by the establishment of regular communication between France and her dependency, and by increases in the French tariff during recent years.

The only other foreign countries whose trade with New South Wales reaches a large figure are China and Japan. The imports and exports credited to Hongkong, however, belong in reality to the Chinese Empire generally, and the diminution which has taken place in the China trade since 1881 is to be attributed in no small degree to the transference of part of the trade from the ports of the Empire to Hongkong. Still, when allowance is made on this score, it will be found that the actual loss of trade is by no means inconsiderable. The main import from China is tea, which exhibits a falling-off, the decline being attributable to the large consumption of Indian and Ceylon teas, the imports of which have largely increased during late years. The direct export trade has never been great. To correctly gauge the commercial relations between this State and China, the trade of Hongkong should be considered in conjunction with the figures given above.

The war with China gave Japan a new importance in the eyes of the world, an importance further enhanced by the Russo-Japanese conflict, and that enterprising country may in the future be expected to offer a large market for many of the products of New South Wales. Direct steam communication between this State and Japan is now firmly established by a fleet of high-class vessels subsidised by the Japanese Government, which recognises the advantages to be derived from the institution of an additional market in these States for the productions of their country, while, on the other hand, the discovery of a new market for Australian wool is fully appreciated by New South Wales producers.

The imports from the United States comprise a large number of articles, amongst the principal being boots and shoes, £20,690; implements for husbandry, £61,638; leather, £19,852; machinery, £322,285; metal manufactures, £174,854; kerosene oil, £116,566; printing paper, £46,690; tobacco, £222,711; tools of trade, £76,763; vehicles, £40,490; and timber, £310,406.

The chief imports from Germany comprised wearing apparel, £71,738; fancy goods, £37,910; pianos, £95,364; china ware, £28,653; drugs and chemicals, £25,756; glassware, £30,051; machinery, £47,769; metal manufactures, £216,982; piece goods, £44,911; printing paper, £25,411; furniture, £29,083.

From France the chief imports in 1907 were cream of tartar, £48,837; piece goods, £8,294; spirits, £7,205; wine, £2,628; tiles, £9,460; and corks and bungs, £12,705.

The list of imports from Belgium is a long one, although liable to fluctuations. The principal articles were iron and steel, £54,791; glass and glassware, £49,548; matches and vestas, £15,473; wine, £24,889; and motors, £15,920.

From Norway and Sweden timber of the value of £34,096 and £19,547 respectively, was received during the year.

For the same period the exports from New South Wales to the countries mentioned in the preceding table were as appended:—

Country.	1870.	1880.	1890.	1900.	1907.
	£	£	£	£	£
Belgium .. .. .	...	...	1,011,846	620,349	3,531,502
France and New Caledonia .. .. .	53,257	181,847	427,313	1,204,059	4,590,880
Germany .. .. .	...	...	404,280	844,495	3,685,469
Netherlands and Java .. .. .	25,981	11,042	50,358	86,203	231,353
Italy .. .. .	...	...	24,498	61,132	146,211
Norway .. .. .	...	...	...	...	22,005
Sweden .. .. .	...	...	...	...	1,159
China .. .. .	17,516	14,844	1,037	68,004	217,368
Japan .. .. .	52	6,581	7,156	133,989	486,083
South Sea Islands .. .. .	131,918	52,657	66,714	126,851	140,282
United States .. .. .	38,817	172,648	1,300,375	3,981,242	811,942
Other Foreign Countries .. .. .	35,349	32,869	169,988	470,809	1,087,251
Total .. .. .	£ 302,890	472,488	3,463,565	7,597,133	14,950,485

As the table shows, the bulk of the exports was consigned to France, Germany, the United States, and Belgium, these four countries taking about 85 per cent. of the total exports to all foreign countries. A classification of the chief articles of export to these countries is appended:—

Article.	France.	Germany.	Belgium.	United States.
	£	£	£	£
Coal .. .. .	...	...	...	265,990
Copper ingots .. .. .	113,862	1,567	128,962	...
Silver-lead ore .. .. .	...	85,830	284,323	...
Sheepskins with wool .. .. .	217,103	1,683	30,281	...
Skins, other .. .. .	7,092	34,604	68,401	162,285
Tin, ingots and ore .. .. .	18,805	6,663	56,168	30,946
Wool .. .. .	4,070,829	3,227,682	2,600,061	250,773

In addition to the above, Japan took wool to the value of £356,727, and Chili, Hawaiian Islands, and the Philippines coal to the value of £446,095, £46,628, and £155,430 respectively. The Philippines received also frozen beef and mutton to the value of £9,702; flour, £58,607; undressed timber, £48,910; and butter, £14,612; the Netherlands kerosene shale valued at £11,957, and silver ore at £46,509; and Italy wool to the value of £55,934.

Under present tariff conditions little extension of commercial intercourse with the United States can be looked forward to; but trade with the East, especially with China, Japan, and the Philippines, gives good promise for the future. As before mentioned, Japan has established a national line of steamers to foster the trade between that country and Australia, and during 1907 received from the State goods valued at £486,083, the chief item being wool, together with smaller quantities of other pastoral products, such as bones, manures, &c. The State also finds a ready market there for wheat and flour.

The chief exports to Java comprised coal, £18,893; flour, £18,493; and horses, £12,964. Most of the requirements of the Dutch East Indies are met by America, but there is no doubt that judicious exploitation of the markets would result in a greatly increased demand for Australian products.

A fair amount of business is transacted with the South Sea Islands, the exports consisting chiefly of foreign goods of all descriptions re-exported, among which may be mentioned apparel, &c., £5,040; piece goods, £16,190; metal manufactures, £6,534; tobacco, £6,067; rice, £9,020; biscuits, £8,219; flour, £8,210. The last two articles mentioned were almost entirely the produce of New South Wales. The imports consist of island produce, the

chief of these being copra, valued in 1907 at £138,773. New Caledonia received exports from the State to the amount of £114,918 during the year 1907, the chief articles being coal, £6,416; flour, £36,516; sugar, £4,641; and kerosene oil, £3,524.

#### IMPORTS FOR HOME CONSUMPTION.

The net imports into New South Wales during 1907 amounted to £28,406,054 or £18 5s. 5d. per head of population. Of this amount £9,880,191 represented the value of Australian produce, and £18,525,863 the value of British and foreign produce. The former, however, includes a fair proportion of goods made from articles of extra-Australian origin. Excluding specie and bullion, the figures are: Australian produce, £8,267,536; British and foreign produce, £18,409,568; total, £26,677,104.

The following statement shows the net imports during the last five years, and the equivalent rates per head of population; stimulants and narcotics being distinguished from other goods:—

Year.	Net Import.			Per Head of Population.		
	Stimulants and Narcotics.	All other Articles.	Total.	Stimulants and Narcotics.	All other Articles.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
1903	857,692	17,840,170	18,697,862	0 12 1	12 11 4	13 3 5
1904	740,505	16,237,689	16,978,194	0 10 3	11 4 6	11 14 9
1905	775,944	19,930,728	20,706,672	0 10 6	13 9 7	14 0 1
1906	852,930	20,412,353	21,265,283	0 11 3	13 9 7	14 0 10
1907	1,105,158	27,300,896	28,406,054	0 14 3	17 11 2	18 5 5

The above figures show the wonderful recovery in the spending power of the people. Since 1904, which was just after the long drought, the net import of stimulants and narcotics has increased by 4s. per head, or 39 per cent., and of all other articles taken together by £6 6s. 8d. per head, or 57 per cent.

The amount collected from customs and excise, and the proportion per head of population during the last twelve years, have been as follows. The year 1896 was the first of the State tariff which was in existence when the Commonwealth took over the Department of Customs, while during 1901, for the first nine months, the collections were under the State tariff, and for the last three under the Commonwealth tariff:—

Year.	Net Amount collected from Customs and Excise.	Per Head of Population.	Year.	Net Amount collected from Customs and Excise.	Per Head of Population.
	£	£ s. d.		£	£ s. d.
1896	1,637,078	1 5 9	1902	3,116,052	2 4 9
1897	1,520,116	1 3 7	1903	3,384,458	2 7 7
1898	1,551,827	1 3 8	1904	3,094,608	2 2 9
1899	1,660,333	1 4 11	1905	3,112,368	2 2 1
1900	1,778,993	1 6 3	1906	3,352,444	2 4 3
1901	2,475,729	1 16 1	1907	4,170,046	2 17 3

Under the Federal tariff the contributions to Customs and Excise have increased by about £1 per head.

More than half the revenue is obtained from the duties, customs and excise, on stimulants and narcotics. Of the other divisions apparel and textiles contributes the largest amount, and then come the divisions comprising agricultural products and groceries, and metals and machinery.

## CUSTOMS AND EXCISE REVENUE.

On the 1st January, 1901, the Department of Customs and Excise was transferred to the control of the Commonwealth. Previously it had been administered by the State. On the 8th October, 1901, the first uniform Federal tariff was introduced in the Federal Parliament, and thereupon the State tariff ceased to have effect. On 8th August, 1907, a new tariff was introduced, which superseded that of 1901, and duties were altered, in many cases being increased considerably. The duties of Customs and Excise are now collected under the Customs Act (No. 7 of 1908), and the Excise Tariff (No. 8 of 1908).

The following statement shows the amounts collected under each division of the tariff during 1907, and also shows the interstate adjustments, and refunds and drawbacks :—

Tariff Division.	Credited.			Debited.				Net Revenue Collected
	Gross Collections.	Inter-state Credits.	Total.	Draw-backs.	Re-funds.	Inter-state Debits.	Total.	
Customs—	£	£	£	£	£	£	£	£
I. Stimulants .. .. .	1,000,144	37,845	1,037,989	....	211	89,699	89,910	948,079
II. Narcotics .. .. .	396,091	39,462	435,553	....	6,603	86,196	92,799	342,754
III. Sugar .. .. .	29,808	5,311	35,119	1,448	3	1,968	3,419	31,700
IV. Agricultural products and groceries .. .. .	291,276	19,474	310,750	9,356	1,042	13,485	23,883	286,867
V. Apparel and textiles .. .. .	747,713	79,528	827,241	11,472	1,311	68,287	81,070	746,171
VI. Metals and machinery .. .. .	349,969	30,032	380,001	6,870	1,251	27,171	35,292	344,709
VII. Oils, paints, and varnishes .. .. .	65,408	5,732	71,140	3,561	1,404	5,861	10,826	60,314
VIII. Earthenware, cement, china, glass, and stone .. .. .	92,861	5,436	98,297	1,074	361	4,991	6,426	91,871
IX. Drugs and chemicals .. .. .	32,877	2,294	35,171	1,536	75	7,629	9,240	25,931
X. Wood, wicker, and cane .. .. .	88,187	12,356	100,543	1,195	314	2,941	4,450	96,093
XI. Jewellery and fancy goods .. .. .	127,300	21,362	148,662	6,826	344	38,936	46,106	102,556
XII. Leather and rubber .. .. .	77,994	17,464	95,458	2,332	228	16,551	19,111	76,347
XIII. Paper and stationery .. .. .	67,895	6,403	74,298	796	146	6,158	7,100	67,198
XIV. Vehicles .. .. .	60,243	3,809	64,052	494	137	4,179	4,810	59,242
XV. Musical instruments .. .. .	31,405	2,335	33,740	329	11	4,842	5,182	28,558
XVI. Miscellaneous .. .. .	61,078	3,826	65,504	1,820	138	4,650	6,608	58,896
Adjustments of Duties on ships' stores .. .. .	....	7,996	7,996	....	....	16,365	16,365	Dr. 8,369
Total, Customs .. .. .	3,520,849	300,665	3,821,514	49,109	13,579	399,909	462,597	3,358,917
Excise—								
Beer .. .. .	175,962	3,812	179,774	150	....	2,127	2,277	177,497
Spirits .. .. .	134,443	4,931	139,374	4	46	2,220	2,270	137,104
Sugar .. .. .	217,317	21,799	239,116	805	121	3,451	4,377	234,739
Tobacco, &c. .. .. .	330,031	37,194	367,225	....	34	117,833	117,867	249,358
Starch .. .. .	6,788	3,584	10,372	5	....	238	243	10,129
Licenses .. .. .	2,302	....	2,302	....	....	....	....	2,302
Total, Excise .. .. .	866,843	71,320	938,163	964	201	125,869	127,034	811,129
Total, Customs and Excise .. .. .	4,387,692	371,985	4,759,677	50,073	13,780	525,778	589,631	4,170,046

## AGRICULTURE.

It is only within comparatively recent years that New South Wales has attained any prominence as an agricultural country. The pastoral industry so completely overshadowed the agricultural that the latter ranked as of very secondary importance, although the soil is as varied as the climate is diversified, and within the boundaries of the State not only the productions of the temperate regions may be cultivated, but even those of cold and sub-tropical latitudes. Except in the inaccessible and rugged portions of the mountain chains and the more arid regions of the north-western districts, it may be said that the greater part of the land adapted for settlement is in some form or other capable of being cultivated. The area absolutely unfit for cultivation of any sort has been roughly estimated to be less than 5,000,000 acres—or about one-fortieth of the whole. The true farming portion of the State comprises the whole of the eastern division, with the exception of the rugged country already referred to, and most of the central division, and it has been proved, by observations extending over a series of years, that in this portion there are about 50,000,000 acres where the rainfall is sufficiently plentiful and regular, in eight years out of ten, for the successful pursuit of agriculture in all its branches. Beyond that portion there is the great division of the Western Plains, where there is an irregular rainfall and a want of uniformity in the seasons, but which is, nevertheless, eminently adapted for wool-growing.

### AREA UNDER CULTIVATION.

During the year ended 31st March, 1908, an area comprising 3,306,217 acres, including grassed lands, was under cultivation. The area under crops properly so-called was 2,570,137 acres, so that the area sown with grasses was 736,080 acres.

The progress of cultivation during the last forty-eight years is shown in the table below. In the following table, and in all others in this chapter, the year covers the period from the 1st April in the year mentioned to the 31st March in the succeeding year:—

Year.	Area under crops during year.		Area in cultivation, including sown grass-lands.	
	Total.	Per inhabitant.	Total.	Per inhabitant.
	acres.	acres.	acres.	acres.
1860	*	.....	260,798	0·7
1870	397,389	0·8	426,976	0·9
1880	629,180	0·9	710,337	1·0
1890	852,704	0·8	1,241,419	1·1
1900	2,445,564	1·8	2,568,305	2·1
1901	2,276,528	1·7	2,744,367	2·0
1902	2,245,839	1·6	2,723,468	2·0
1903	2,542,919	1·8	3,095,420	2·2
1904	2,672,973	1·8	3,280,970	2·2
1905	2,838,081	1·9	3,465,611	2·3
1906	2,824,211	1·8	3,521,842	2·3
1907	2,570,137	1·6	3,306,217	2·1

\* Information not available.

During the first thirty-one years after the separation of Queensland, New South Wales made very slow progress in agriculture, and it was not until 1892 that the area under crop exceeded a million acres. During

the next six years, two million acres were exceeded, but in 1907 the area barely exceeded two and a half million acres. The largest increase in any year was in 1898, when it amounted to 382,671 acres, or over 20 per cent. A better idea of the progress of agriculture, however, is obtained by comparing the area under crop with the population. Up to 1893, less than 1 acre per head was cultivated; between 1893 and 1898 the proportion doubled, but since 1898 it has remained practically stationary. The following statement shows, since 1870, in decennial periods, the relative increases in population and in the area under crop:—

	1870-80.	1880-90.	1890-1900.	1900-07.
Increase per cent. in population	50.0	50.0	21.6	15.3
Increase per cent. in area under crop	58.3	35.5	186.8	5.1

From 1880 to 1890, the population increased nearly half as fast again as the area under crop, but during the next decennial period the cultivation increased 186.8 per cent. This increase was due, to a large extent, to the cultivation of large areas on holdings hitherto used for pastoral purposes only, while the decline from 1900 onwards has been due partly to the vicissitudes of the climate, but largely to increased attention given to dairying.

The following statement shows the districts where the greatest advance has been made:—

Division.	Area under crops.		Increase, 1897-1907.		Proportion of total area under crop.	
	1897.	1907.	Total.	Per cent.	1897.	1907.
Coastal—	acres.	acres.	acres.		per cent.	per cent.
North Coast ...	103,864	91,781	—12,033	—11.6	5.7	3.6
Hunter and Manning ...	109,596	104,166	—5,430	—5.0	6.0	4.0
Cumberland ...	48,439	42,822	—5,617	—11.6	2.7	1.7
South Coast ...	52,963	46,470	—6,493	—12.3	2.9	1.8
Total ...	314,862	285,239	—29,623	—9.4	17.3	11.1
Tableland—						
Northern ...	65,872	60,468	—5,404	—8.2	3.6	2.4
Central ...	207,496	198,361	—9,135	—4.4	11.4	7.7
Southern ...	63,633	48,893	—14,740	—23.2	3.5	1.9
Total ...	337,001	307,722	—29,279	—8.7	18.5	12.0
Western Slopes—						
North ...	88,820	273,794	184,974	208.3	4.9	10.7
Central ...	155,505	402,090	246,585	158.6	8.5	15.6
South ...	286,919	404,293	117,374	40.9	15.8	15.7
Total ...	531,244	1,080,177	548,933	103.3	29.2	42.0
Riverina ...	564,357	645,801	81,444	14.4	31.0	25.1
Western Plains—						
North ...	2,644	7,975	5,331	201.6	0.1	0.3
Central ...	52,783	231,001	178,218	337.6	2.9	9.0
Total ...	55,427	238,976	183,549	331.2	3.0	9.3
Western Division ...	18,938	12,222	—6,716	—35.5	1.0	0.5
All Divisions	1,821,829	2,570,137	748,308	41.1	100.0	100.0

The largest aggregate increase has taken place in the Central-western slope, where 246,585 acres of new land were brought under the plough during the ten years. Taken as a whole, the Western Slopes show an advance of 548,933 acres. The districts which are most cultivated are the Riverina, which comprises 25.1 per cent. of the land under crops; the South-western Slope; with 15.7 per cent., and the Central-western Slope, with 15.6 per cent. The North-western Slope, the Central-western Plain, and the Central Tableland are close together, with 10.7, 9.0, and 7.7 per cent., respectively. In the Riverina the advance has been largest in

counties Bourke, Urana, and Mitchell. In the northern portion of the Western Slopes the counties Darling, Parry, and Pottinger show the most advance; in the central portion, Ashburnham and Lincoln; and in the southern portion, Bland and Monteagle. In the Central-western Plain the increase has been in Narromine and Cunningham. The largest increase in any country was in Bland, in the South-western Slope amounting to over 80,000 acres. The counties which showed the largest area under crop on the 31st March, 1908, were—Bourke, 163,633 acres; Hume, 123,649 acres; and Denison, 103,179 acres in the Riverina; Bland, 134,047 acres; Ashburnham, 130,581 acres; and Lincoln, 108,543 acres in the Western Slopes.

The great extension of cultivation during the last sixteen years has been largely fostered by wheat-growing on large estates formerly devoted almost exclusively to grazing, and also by the adoption of the system of farming on shares. During the year 1907 the area cultivated on shares was 348,444 acres, of which 125,546 acres, or more than one-third, were in the Riverina division.

In order that the figures relating to cultivation may be appreciated, the following table has been prepared, showing the area under crops, in conjunction with the total area, and the area in occupation, in each division during 1907:—

Division.	Total area.	Area under occupation in holdings over 1 acre.	Area under crops.	Area under sown grasses.	Proportion of area under crops.	
					To total area.	To area under occupation.
<b>Coastal—</b>	acres.	acres.	acres.	acres.	per cent.	per cent.
North Coast ... ..	5,409,370	4,213,790	91,781	457,596	1·7	2·2
Hunter and Murrumbidgee ... ..	10,390,920	5,966,360	104,166	49,744	1·0	1·7
Cumberland ... ..	1,070,989	540,763	42,822	1,568	4·0	7·9
South Coast ... ..	5,484,122	2,515,111	46,470	167,383	0·8	1·8
	22,355,401	13,236,024	285,239	676,291	1·3	2·2
<b>Tableland—</b>						
Northern ... ..	8,923,487	7,548,707	60,468	10,756	0·7	0·8
Central ... ..	8,989,259	6,411,315	198,361	11,462	2·2	3·1
Southern ... ..	7,913,500	6,688,871	48,893	4,441	0·6	0·7
	25,831,246	20,648,893	307,722	26,659	1·2	1·5
<b>Western Slopes—</b>						
North ... ..	9,813,555	8,468,447	273,794	5,170	2·8	3·2
Central ... ..	6,252,567	5,042,801	402,090	980	6·4	8·0
South ... ..	8,185,759	7,362,944	404,293	4,541	4·9	5·5
	24,251,881	20,874,192	1,080,177	10,691	4·4	5·2
Riverina ... ..	19,767,073	18,352,330	645,801	18,877	3·3	3·5
<b>Western Plains—</b>						
North ... ..	10,030,901	7,324,870	7,975	.....	0·1	0·1
Central ... ..	16,029,880	14,497,255	231,001	3,505	1·4	1·6
	26,060,781	21,822,125	238,976	3,505	0·9	1·1
<b>Western Division</b> ... ..	80,368,498	76,554,901	12,222	57	0·0	0·0
<b>All Divisions</b> ... ..	198,634,880	171,488,465	2,570,137	736,080	1·3	1·5

Only about 1·3 per cent. of the total area of New South Wales is actually devoted to the growth of agricultural produce, and if the small extent of land upon which grasses have been sown for dairy-farming purposes be added to the area under crops, the proportion reaches only 1·7 per cent., and represents about 2·1 acres per head of its population. The proportion of the cultivated area on alienated holdings is only 4·7 per cent. of the total area of alienated rural lands. Of the area in occupation, 49,901,837 acres are alienated and 121,586,628 acres are Crown leases.

Agricultural settlements, pure and simple, are confined to very limited areas in the alluvial lands of the lower valleys of the coastal rivers, and to parts of the southern and central divisions of the tableland. The growth of crops is largely carried on in conjunction with grazing. Tenant occupancy, so general in the United Kingdom, is but little known in New South Wales, for the total area under crops, 2,065,262 acres, or 80·4 per cent., were cultivated by the owners, while 504,875 acres, or 19·6 per cent., were cultivated by tenant occupiers, including Crown land lessees.

In addition to the area shown as cultivated and under sown grasses, 52,314,513 acres were ringbarked and partly cleared, and 1,582,325 acres were ready for cultivation on alienated holdings.

Cultivation is not confined to any particular districts, but is carried on in all parts of the State. Some of the best lands for producing cereals are, and will remain probably for many years, in the hands of the pastoralists; so that farmers have not always settled on the kind of country best suited for the cultivation of their crops.

The county of Cumberland, which contains the Metropolis, has a large area cultivated in proportion to area under occupation, but generally the Western Slopes show the largest relative areas under cultivation, followed by the Riverina and Central Tableland. In the north-western plain and the western division there is practically no cultivation.

By far the largest proportion of the area under crops is devoted to the cultivation of wheat, which in 1907 took up 54·0 per cent. of the total. Hay was responsible for 21·1 per cent., after which came green food 10·1 per cent., maize 6·3 per cent., and oats 3·0 per cent. The following statement shows the area devoted to the cultivation of each of the principal crops, at decennial intervals since 1880, and the proportion per cent. of each to the total:—

Crop.	Area.				Proportion per cent.			
	1880.	1890.	1900.	1907.	1880.	1890.	1900.	1907.
	acres.	acres.	acres.	acres.				
Wheat ... ..	253,137	333,233	1,530,609	1,390,171	40·2	39·1	62·6	54·0
Maize ... ..	127,196	191,152	206,051	160,980	20·2	22·4	8·4	6·3
Barley ... ..	8,056	4,937	9,435	11,890	1·3	·6	·4	·5
Oats ... ..	17,922	14,102	29,383	75,762	2·9	1·6	1·2	3·0
Hay ... ..	131,153	175,242	466,236	542,761	20·9	20·6	19·1	21·1
Green food ... ..	21,383	37,473	78,144	260,810	3·4	4·4	3·2	10·1
Potatoes ... ..	19,095	19,406	29,408	31,917	3·0	2·3	1·2	1·2
Sugar-cane ... ..	10,971	20,446	22,114	17,953	1·7	2·4	·9	·7
Vines ... ..	4,800	8,044	8,441	8,483	0·8	·9	·3	·3
Orchards ... ..	24,565	33,643	46,234	46,714	3·9	3·9	1·9	1·8
Market-gardens ... ..								
	5,098	7,764	10,052		·6	·3	·4	
Other crops ... ..	10,902	9,928	12,948	15,380	1·7	1·2	·5	·6
Total ... ..	629,180	852,704	2,446,767	2,572,873	100	100	100	100

The figures for the year 1900 and 1907 include the areas double-cropped, viz., 1,203 acres and 2,736 acres respectively.

The area devoted to wheat has always exceeded that given to other crops, and from the year 1880 the proportion has steadily increased, until it now stands at more than half the whole area under cultivation. During the same time the proportion under maize has decreased from 20 per cent. to 6 per cent. The other crops have not varied much, except that the tendency has been for the proportion to decrease.

VALUE OF PRODUCTION.

The average value of the principal crops, with the proportion of each to the total value, during the last three years, is shown in the following table; the values are based on prices obtained at the farm:—

Crop.	Value.			Proportion per cent.		
	1905.	1906.	1907.	1905.	1906.	1907.
	£	£	£			
Wheat ... ..	2,920,500	2,943,150	1,831,180	44·6	39·1	27·8
Maize ... ..	669,385	720,375	905,570	10·2	9·6	13·7
Barley ... ..	15,840	23,015	16,160	·2	·3	·2
Oats ... ..	110,385	152,160	117,120	1·7	2·0	1·8
Hay and straw ... ..	1,393,285	1,767,920	1,878,280	21·3	23·5	28·5
Green food... ..	174,880	245,785	523,620	2·7	3·3	7·9
Potatoes ... ..	266,615	548,470	207,590	4·1	7·3	3·2
Sugar-cane... ..	161,240	192,500	252,480	2·5	2·6	3·8
Grapes ... ..	51,330	76,580	43,060	·8	1·0	·7
Wine and brandy... ..	68,860	81,520	65,220	1·1	1·1	1·0
Oranges and lemons ... ..	120,045	122,460	202,460	1·8	1·6	3·1
Orchards ... ..	189,195	230,135	153,110	2·9	3·1	2·3
Market gardens ... ..	248,678	258,000	262,786	3·8	3·4	4·0
Other crops ... ..	152,812	155,480	129,354	2·3	2·1	2·0
Total ... ..	6,543,050	7,517,550	6,587,990	100	100	100

It will be seen to what an extent the return from agriculture depends upon wheat and hay, these crops in 1907 returning £3,709,460, or 56 per cent. of the total production. The value in 1903 was the largest ever received in New South Wales, and was due to the record wheat yield of that season. Maize follows wheat in value, but at a considerable distance; while the return from sugar-cane, vines, green food, orchards, and gardens, although valuable, does not exhibit a very high proportion.

The next statement shows the value of the production from agriculture in 1870, 1880, and each year since 1890, as well as the value per acre:—

Year.	Value of production.	Value per acre.	Year.	Value of production.	Value per acre.
	£	£ s. d.		£	£ s. d.
1870	2,220,000	5 11 9	1898	4,874,696	2 4 3
1880	3,849,423	6 2 4	1899	5,609,437	2 6 0
1890	4,181,940	4 18 1	1900	5,855,674	2 8 0
1891	3,614,594	4 5 5	1901	7,060,203	3 2 0
1892	4,004,402	3 19 3	1902	4,138,627	1 16 10
1893	3,903,749	3 4 8	1903	8,358,924	3 5 9
1894	3,438,512	2 11 10	1904	5,413,710	2 0 6
1895	4,100,709	3 0 10	1905	6,543,050	2 6 1
1896	5,373,614	3 4 9	1906	7,517,550	2 13 3
1897	6,249,677	3 8 7	1907	6,587,990	2 11 3

The highest relative value received was in 1881, when the return was £4,215,268, or £7 4s. 5d. per acre. A decrease in prices, and not want of productiveness, was responsible for the decline in value after 1881. The fall in prices, especially of wheat, was very rapid down to 1895; for the next three years there was a very material increase; in 1899 they fell again to the 1895 level; but in 1901 there was a more or less general increase; while towards the close of 1902, and almost up to the close of 1903, the effects of the adverse season were acutely felt, and prices rose to double those of the previous year. At the end of 1903, when the heavy crops began to come in, prices again fell, but they were, nevertheless,

higher than the 1901 level. In 1904 prices increased slightly, and were generally higher than at the close of 1903. In 1905 there was a slight falling off as compared with 1904. In 1907 there was a marked increase in the prices.

## WHEAT.

In New South Wales, as in most other countries, the area devoted to wheat far exceeds that of any other cereal, and it is in this form of cultivation that the State shows the greatest expansion. In 1907 the area under wheat for grain was 1,390,171 acres, which was 54 per cent. of the whole area under cultivation. The year 1897 may be said to mark the beginning of the present era of wheat-growing in New South Wales, for it was in that year that the production for the first time exceeded the consumption, and left a surplus available for export. The following statement shows the increase in the area under wheat, between 1897 and 1907, in the various districts:—

Division.	Area under wheat for grain.		Increase, 1897-1907.	Proportion in each district.	
	1897.	1907.		1897.	1907.
	acres.	acres.	acres.	per cent.	per cent.
Coastal ... ..	16,192	4,940	— 11,252	1·6	·4
Tableland—					
Northern ... ..	20,686	6,362	— 14,324	2·1	·4
Central ... ..	80,318	62,587	— 17,731	8·1	4·5
Southern ... ..	22,421	4,990	— 17,431	2·2	·4
	123,425	73,939	— 49,486	12·4	5·3
Western Slopes—					
North ... ..	59,330	172,907	113,577	6·0	12·4
Central ... ..	102,136	273,025	170,889	10·3	19·6
South ... ..	198,268	274,950	76,682	19·9	19·9
	359,734	720,882	361,148	36·2	51·9
Western Plains ... ..	31,589	142,979	111,390	3·2	10·3
Riverina ... ..	460,474	445,537	— 14,937	46·4	32·0
Western Division ... ..	1,936	1,894	— 42	·2	·1
All Divisions ... ..	993,350	1,390,171	396,821	100·0	100·0

The next statement shows the yield in each of the abovenamed districts in the same years:—

Division.	Yield of grain.		Average yield per acre.		
	1897.	1907.	1897-1907.	1897.	1907.
	bushels.	bushels.	bushels.	bushels.	bushels.
Coastal ... ..	329,274	23,996	12·4	20·3	4·9
Tableland—					
Northern ... ..	300,215	90,728	13·8	14·5	14·3
Central ... ..	933,296	479,404	11·6	11·6	7·7
Southern ... ..	242,556	42,176	11·9	10·8	8·5
	1,476,067	612,308	11·9	12·0	8·3
Western Slopes—					
North ... ..	1,208,859	1,070,344	12·1	20·4	6·2
Central ... ..	1,398,967	2,033,284	11·1	13·7	7·4
South ... ..	1,849,521	2,482,004	10·1	9·3	9·0
	4,457,347	5,585,632	10·9	12·4	7·7
Western Plains ... ..	563,066	611,852	8·4	17·8	4·3
Riverina ... ..	3,725,421	2,306,188	8·3	8·1	5·2
Western Division ... ..	8,936	15,908	5·5	4·6	8·4
All Divisions ... ..	10,560,111	9,155,884	9·8	10·6	6·6

As might perhaps have been expected, the proportions of land under wheat in each district generally follow the same order as shown in a previous table for the total area under cultivation. Between 1897 and 1907, however, the proportions in each district have changed considerably. The tablelands, for instance, now only include 5·3 per cent., as against 12·4 per cent. in 1897, and the Riverina 32 per cent., as against 46·4 per cent., while the Western Slopes have increased from 36·2 to 51·9 per cent., and the Western Plains from 3·2 to 10·3 per cent. The largest increase in area has been in the Central-western Slope, where it is now nearly three times as large as in 1897, closely followed by the North-western Slope, the Western Plains, and the South-western Slope. The reduced areas in the Riverina and Central Tableland are the result of unfavourable ploughing seasons during the last two years. On the northern and southern tablelands, wheat-growing has declined in favour. The great bulk of the wheat, however, is grown on the Western Slopes and in the eastern part of the Riverina, these two districts together embracing nearly 84 per cent. of the whole. On the Coast, in the Western Division, and in the Central-western Plain with the exception of the eastern fringe, the wheat area is very small. The whole of the expansion in the Western Plains is accounted for by the increase around Narromine.

The most prolific district usually is the North-western Slope, which shows the highest average yield for the period covered by the table, and it should be remembered that these years were amongst the most adverse experienced by the State. The Riverina and South-western Slope, which yield the largest aggregate crops, of course affect the general average for the whole State most, and their averages are not far from the mean. The average yields on the northern tableland are high, but the aggregate yield is not large. The best yield obtained in the State was in 1903, when it amounted to 27,334,141 bushels, and averaged 17·5 bushels per acre; otherwise the yield in 1906 was the highest.

A great proportion of the immense areas of the State, hitherto devoted exclusively to pastoral pursuits, consists of land which could be profitably utilised for agriculture, much of it being more suitable for the cultivation of wheat than some of the land now under crop; and the returns show that wheat-growing, which was formerly confined to small farmers, is now engaging the attention of a number of the large landholders, who cultivate large areas of thousands of acres in extent, and use the most modern and effective implements and machinery for ploughing, sowing, and harvesting.

A considerable portion of the new area which is being brought under wheat in New South Wales is cultivated on the shares system, especially in the southern portion of the State. Under this system, the owner leases the land to the agriculturist for a season, or a few seasons, for the purpose of wheat-growing only, the farmer possessing the right of running upon the estate the horses necessary for working the farm, and the owner the right of depasturing his stock when the land is not in actual cultivation. It is usual for the owner to provide seed, and the tenant labour; and up to a specified yield the parties to the agreement take equal shares of the produce, any excess going to the farmer as a bonus. The system, however, is subject to local arrangements. The number of acres farmed on the halves system during 1907 was 348,444, and during the preceding year 429,543.

The progress of wheat-growing for many years was slow and irregular. For some years prior to 1866 the area under crop remained almost stationary at a little more than 125,000 acres, but in 1866 the acreage had increased to 175,000. Eleven years later, the area reaped for grain was practically the same, although during the intervening period it had

fluctuated somewhat. Then more land was laid under the cereal, and in 1878 the area increased to 233,252 acres. In 1890, twelve years later, the acreage stood at 333,233 acres, although during the interval it had reached as high as 419,758 acres. From 1892 onwards progress was more regular. A great impetus was given to the industry in 1896, when the area increased to 866,112 acres, while in 1900 it had advanced to 1,530,609 acres, and in 1905 to 1,939,447 acres. The following statement shows the area under wheat for grain at intervals since 1875, together with the total production and average yield per acre:—

Year,	Area under wheat for grain.	Yield.		Year.	Area under wheat for grain.	Yield.	
		Total.	Average per acre.			Total.	Average per acre.
	acres.	bushels.	bushels.		acres.	bushels.	bushels.
1875	133,609	1,958,640	14·66	1905	1,939,447	20,737,200	10·69
1880	253,137	3,717,355	14·69	1906	1,866,253	21,817,938	11·69
1885	264,867	2,733,133	10·45	1907	1,390,171	9,155,884	6·59
1890	333,233	3,649,216	10·95				
1895	596,684	5,195,312	8·71				
1900	1,530,609	16,173,771	10·56				
1901	1,392,070	14,808,705	10·64	Average for 30 years ended 1907			10·58
1902	1,279,760	1,585,097	1·24	" 10 years " 1887			14·62
1903	1,561,111	27,334,141	17·51	" " " 1897			10·89
1904	1,775,955	16,464,415	9·27	" " " 1907			9·75

The advance which New South Wales is now making in wheat cultivation is in every way gratifying, although there has been a set-back during the last two years. Despite the vicissitudes of the climate, it will be seen from the above table that lack of capacity to produce a payable average has not been the cause of this tardiness in development. During the last thirty years, the mean annual average yield has been 10·58 bushels to the acre. The highest averages recorded have been 17·51 in 1903, and 17·37 in 1886. The lowest was 1·24 bushels in the disastrous year of 1902. During the whole period there were only seven seasons when the yield fell below 10 bushels per acre, the failures in each case being due to drought.

In spite of the lower averages of certain years, it may be said that from equal qualities of soil a better yield is now obtained than that realised twenty years ago, a result due largely to improved farming, the use of fertilisers, and more economical harvesting appliances, and to the fact that rust, smut, and other forms of disease in wheat have been less frequent and less general in recent years.

#### AREA SUITABLE FOR WHEAT-GROWING.

If reference be made to the map at the beginning of this volume, it will be observed that two lines traverse it from north to south. Of these, the line marked by dash and circle denotes the westward limit of that part of the State which has, theoretically—(a) sufficient rainfall to admit of ploughing operations being carried out at the right time; (b) sufficient also to cover the growing period of the wheat plant; and (c) sufficient rainfall during the months of September and October to fill the grain, or, in the case of districts where, notwithstanding the rains in these months are light, the deficiency is made up by the increased falls in the earlier or later months.

The line marked by dash and cross represents the westward limit of profitable wheat-growing, based upon actual results.

It is to be remembered, in discussing the crop-line, that the average crops recorded over the greater part of Riverina are below what might be

obtained, as it is unfortunately true that the majority of the farmers do not get anything like the results from their land that are possible under good treatment. In many instances the land is badly prepared, the grain sown too late, the methods of harvesting wasteful (much of the grain being lost), and the use of fertilisers is not by any means general. Experts place the loss as high as 2 bushels per acre, and rarely less than 1 bushel; and it is certain that the average yields would be considerably increased with better farming conditions. In determining the crop-line, therefore, consideration was given to the poor results attributable to bad farming, as well as to losses by other preventable causes such as by rabbits, bush fires, &c.

It is, however, possible that a more rigid definition of successful farming might even exclude districts now placed within the wheat area. For example, several districts along the edge of the line, such as Tocomwal, Wagga, Temora, Young, and Parkes have been included, although results have been rather doubtful, two—and, in some cases, as many as four—failures having been recorded in ten years.

In some of the northern districts within the line, much of the land is considered unsuitable for wheat-growing, consisting of stony, hilly country, too rough for cultivation, and of black soil plains, which bake and crack, and present mechanical difficulties in tillage. The rich soils of river flats must also be omitted from good wheat-growing areas, as such land has a tendency to produce excessive straw growth, although excellent hay can, of course, be grown.

September and October are generally looked upon as the most critical months as regards rainfall—this being the time for the filling of the grain. Heavy soils require more rain than light soils, especially if the latter possess retentive sub-soils. The nature of the soil, as well as questions of elevation, temperature, evaporation, &c., have an important bearing on the rainfall needed for wheat and general culture, and there are few matters of more importance in regard to settling people on the land under payable conditions than the question of soil characteristics.

Excluding the coastal area, where wheat-growing has been practically abandoned during recent years owing to the liability to rust, the area comprised within the wheat belt and suitable for its cultivation has been estimated to cover from 20,000,000 to 25,000,000 acres.

#### INCREASE IN THE WHEAT YIELD.

It has been shown that the area under wheat is 1,390,171 acres, which is a very insignificant portion of the total just mentioned, and even this small acreage is not worked as profitably as it might be. Compared with the principal wheat-growing countries of the world, an average yield of 10 bushels per acre is very small, as will be seen from the table below. The averages shown are based on the latest available returns:—

Country.	Average yield per acre.	Country.	Average yield per acre.
	bushels.		bushels.
United Kingdom ... ..	34·0	India ... ..	10·7
Germany ... ..	29·6	Russia ... ..	8·0
France ... ..	22·5	Argentina ... ..	11·1
Hungary ... ..	15·2	Canada (Ontario, Manitoba, Quebec, Alberta and Saskatchewan)	15·5
United States ... ..	13·6		

A bare statement of averages is, however, not altogether convincing, as the relative cost of production should also be taken into consideration.

Furthermore, it must be remembered that in the older countries the efforts of farmers are more concentrated, and what is known as intense cultivation is of necessity the rule. In this State, wherever agriculturists have confined their operations to a restricted area, and have made systematic efforts to put the soil to its fullest use, their returns have been infinitely better than those obtained from imperfect cultivation of areas beyond the capacity of the holder's teams and implements.

It is not unreasonable to expect that the rough and ready methods of farming which prevail in several of the outlying districts will soon disappear, and that the yield will increase by at least 2 or 3 bushels per acre. The lack of system in farming is almost necessarily prevalent amongst pioneers in new countries. In many instances the settlers have begun with little if any capital, and with very little practical knowledge, and there are probably very few places where persons without capital could have succeeded so well.

That the possibilities of New South Wales are great must be admitted, and if only a quarter of the area favourable for growing wheat were cultivated on scientific lines there would be a probable surplus of over 50,000,000 bushels available for export after satisfying all the demands of the local population. There is a very large market for breadstuffs in the United Kingdom, the average annual import during the last five years having been over 200 million bushels, of which less than 4 millions were received from this State. Were the farmers to grow those wheats most in demand in Great Britain there should be very little of the year's crop unsold, and little risk of the local price falling so low as to be unprofitable. There is also an increasing demand for Australian wheat in the markets of the East.

In the British markets, during 1907, New South Wales wheat was quoted at 33s. 4d. per quarter, or 1s. 10d. per quarter higher than the Argentine grain, 2s. 9d. higher than English, and 9d. lower than Canadian. Usually it is about 2s. per quarter higher than the English.

#### COST OF GROWING AND EXPORTING WHEAT.

The cost of raising wheat depends entirely upon the size of the holding, for a large farm with first-class agricultural appliances can be worked at a very much lower proportionate cost than a small one. An estimate of the cost of growing wheat ought to include rent, or interest on purchase-money of land, and carriage to the market. Careful inquiries show that in New South Wales, taking the producing factors into account, such as the proportions of lands variously prepared and sown, the proportion of crops harvested by different methods, average railway and other freights, but excluding interest on capital, rent, &c., the cost of landing wheat in Sydney may be set down at 19d. per bushel with a 10-bushel crop. In the near future, with the increased use of improved machinery, the average cost is likely to be much reduced.

The following may be taken as representing the minimum cost per acre of raising wheat on farms of large areas where the disc plough and drill are used:—

	10-bushel crop per acre.
Initial expenses, <i>i.e.</i> , seed, bluestone, ploughing, harrowing, sowing, and rolling	7 3
Expenses dependent upon the crop—stripping, winnowing, and bagging	4 9
Expenses dependent upon the situation of the land, cartage, say, 6 miles road and 200 to 300 miles train	3 4
Total	15 4

There would probably be an additional cost up to 2s. 6d. per acre on a smaller area. If a four-furrow plough be used instead of disc the cost would be about 2s. per acre more; and if the seed is broadcasted instead of drilled another 3s. 3d. per acre would be required.

Apart from the initial cost of raising the cereal, the cost of placing the wheat on the London market, from the point of production on the farm, may be set down as follows:—

Cartage to railway station (6 miles) ... ..	¾d. per bushel.
Average railway freight (300 miles) ... ..	3¼d. „
Expenses in port ... ..	¾d. „
Ocean freight (21s. 9d. per ton)... ..	7d. „
Insurance, selling and other charges in London ... ..	1½d. „
Total ... ..	1s. 1¼d. „

The ocean freight quoted above is by sailing vessel, by which about three-fourths of the wheat is exported. If it is sent by steam vessel, the freight will be about 4s. or 5s. per ton more.

#### PRICE OF WHEAT.

The price of wheat is subject to constant fluctuation, as shown in the following table, which gives the average rates ruling in the Sydney market in the months of February and March of each year since 1865. These figures exhibit clearly the tendency to a gradual reduction in the value of the cereal down to 1895, when the price was the lowest of the series. In 1896, however, owing to a decrease in the world's supplies, the price rose considerably, and led to an extension of cultivation in Australasia. Up to a few years ago, with a deficiency in the local production, the price in Sydney was generally governed by the rates obtained in the neighbouring Australian markets where a surplus was produced. These, again, are now determined by the figures realised in London, which are usually equal to those ruling in Sydney, plus freight and charges. The prices in the following table are for an imperial bushel, and, being for new wheat, are slightly below the average for the year.

Year.	February.	March.	Year.	February.	March.	Year.	February.	March.
	per bushel.	per bushel.		per bushel.	per bushel.		per bushel.	per bushel.
	s. d.	s. d.		s. d.	s. d.		s. d.	s. d.
1865	9 6	9 7½	1880	4 8	4 9	1895	2 7	2 7
1866	8 4½	8 0	1881	4 1	4 3	1896	4 4½	4 5
1867	4 3	4 4	1882	5 5	5 6	1897	4 8	4 6½
1868	5 9	5 9	1883	5 1½	5 2	1898	4 0	4 0
1869	4 9	4 10	1884	4 3	4 3	1899	2 7½	2 9
1870	5 0	5 1½	1885	3 10½	3 7½	1900	2 9	2 8
1871	5 7½	5 9	1886	4 3½	4 5	1901	2 7	2 7
1872	5 0½	5 3	1887	3 10	3 11	1902	3 2	3 2½
1873	5 1	5 8½	1888	3 6	3 6½	1903	.....	.....
1874	6 9	6 1½	1889	4 9	5 3	1904	3 0½	3 0½
1875	4 7½	4 6	1890	3 6	3 6	1905	3 4½	3 3½
1876	5 1½	5 6	1891	3 7½	3 10	1906	3 1½	3 2½
1877	6 1½	6 6	1892	4 9	4 9	1907	3 0½	3 1½
1878	6 1½	5 7½	1893	3 6½	3 6	1908	4 4	4 5½
1879	5 0	4 9½	1894	2 11	2 8			

During recent years the price did not vary greatly in 1899, 1900, and 1901. There were no quotations in 1903, owing to the almost universal failure of that season's crop. In 1908 the figure was higher than in any year since 1897.

## CONSUMPTION OF WHEAT.

New South Wales was for many years largely dependent on external supplies to meet her demands for wheat consumption, and it was not until 1898 that for the first time the production exceeded the consumption, and there was an apparent surplus of 1,123,000 bushels. Since then there have been deficiencies in 1899 and 1903. The apparent annual consumption per head of population ranges from 5·9 bushels in 1891 and 1905 to as much as 10·5 bushels in 1904. In the earlier years of the State the consumption appears to have been generally much higher than at the later periods; but the quality of the yield was inferior in the initial stages of wheat-growing, and the produce used as human food varied according to the preponderance of wheat unfit for milling purposes. In more recent years occasional advances in the average may in like manner be ascribed to this cause, while the consumption is also affected by the state of the maize market, short supplies leading to a larger demand for wheat as food for poultry, pigs, etc.

During the last ten years the Government agricultural experts have been endeavouring to determine the varieties of wheat most suitable for the various districts, and to secure new types which would return the best milling results under local conditions. It is very gratifying to record that their efforts have been attended with marked success.

The statement below shows during each of the last ten years the net export or import of breadstuffs from the State, and the apparent consumption, including wheat required for seed. The figures for flour have been converted into the grain equivalent, 1 ton of flour being regarded as equal to 50 bushels of wheat.

Year.	Wheat crop, year ended 31st March.	Year ended 31st December.		Apparent consumption including grain for seed.	
		Net export.	Net import.	Total.	Per head.
	bushels.	bushels.	bushels.	bushels.	bushels.
1898	10,560,111	1,122,758	.....	9,437,353	7·2
1899	9,276,216	.....	2,126,453	11,402,669	8·6
1900	13,604,166	3,513,112	.....	10,091,054	7·5
1901	16,173,771	7,702,072	.....	8,471,699	6·2
1902	14,808,705	2,774,782	.....	12,033,923	8·6
1903	1,585,097	.....	6,919,765	8,504,862	6·0
1904	27,334,141	12,207,661	.....	15,126,480	10·5
1905	16,464,415	7,695,496	.....	8,768,919	5·9
1906	20,737,200	8,249,807	.....	12,487,393	8·2
1907	21,817,938	8,636,733	.....	13,181,205	8·5

## MAIZE.

Maize ranks second in importance amongst the crops of New South Wales; but it is not now of anything like the importance of wheat, although thirty-two years ago there was very little difference in the areas under each cereal. In 1880 the area under maize was half that under wheat; now it is less than one-eighth.

The cultivation of maize is carried on chiefly in the valleys of the coastal rivers, where both soil and climate are peculiarly adapted for its growth. On the tableland also its cultivation is attended with good results, but as the land rises in elevation so does the average yield per acre proportionately decrease, although in compensation the grain produced is of more

enduring quality for export and storage. The following statement shows the distribution of the area under maize for grain during 1907, with the production and average yield in each district:—

District.	Area under maize for grain.		Yield.	
	Acres.	Per cent. of total area.	Bushels.	Bushels per acre.
Coastal—				
North ... ..	63,083	39·2	2,047,980	32·5
Hunter and Manning ... ..	38,706	24·1	1,141,260	29·5
Cumberland ... ..	2,883	1·8	54,832	19·0
South ... ..	10,368	6·4	357,928	34·5
	115,040	71·5	3,602,000	31·3
Tableland—				
Northern ... ..	12,526	7·8	244,384	19·5
Central ... ..	10,097	6·2	219,192	21·7
South ... ..	1,297	·8	27,072	20·9
	23,920	14·8	490,648	20·5
Western Slopes... ..	21,563	13·4	428,408	19·9
Western Plains, Riverina, and Western Division... ..	457	·3	6,796	14·9
All Districts ... ..	160,980	100·0	4,527,852	28·1

The North Coast is by far the most important maize-growing district in the State, having yielded in 1907 nearly one-half the total production, the average yield being 32·5 bushels per acre. After the North Coast, the Hunter and Manning district shows the largest area under crop, although the South Coast gave the highest average yield. The highest average yield in any county was in Auckland, in the South Coast division, with 43·5 bushels per acre. On the North Coast, the best counties were Raleigh and Dudley, which gave 36 and 38 bushels per acre respectively. In 1907 the average yield on the tableland and western slopes was over 30 per cent. below that on the coast. At an early period of the history of the North Coast maize displaced wheat as a product, but latterly its culture has been to some extent abandoned in favour of dairying and sugar-growing.

The next statement gives a comparative review of the maize crop since 1888:—

Year.	Area under maize for grain.	Production.		Year.	Area under maize for grain.	Production.	
		Total.	Average per acre.			Total.	Average per acre.
	acres.	bushels.	bushels.		acres.	bushels.	bushels.
1888	166,101	4,910,404	29·6	1900	206,051	6,292,745	30·5
1889	173,836	5,354,827	30·8	1901	167,333	3,844,993	23·0
1890	191,152	5,713,205	29·9	1902	202,437	3,049,269	15·1
1891	174,577	5,721,706	32·8	1903	226,834	6,836,740	30·1
1892	167,549	5,037,256	30·1	1904	193,614	4,951,132	25·6
1893	205,885	7,067,576	34·3	1905	189,353	5,539,750	29·3
1894	208,308	5,625,533	27·0	1906	174,115	5,763,000	33·1
1895	211,104	5,687,030	26·9	1907	160,980	4,527,852	28·1
1896	211,382	5,754,217	27·2				
1897	209,588	6,713,060	32·0	Average for 20 years ended 1907			28·7
1898	193,286	6,064,842	31·4	“ 10 “ 1897	“ 10 “ 1897	“ 1897	30·0
1899	214,697	5,976,022	27·8	“ 10 “ 1907	“ 10 “ 1907	“ 1907	28·4

During the last twenty years there have been several fluctuations in the area under cultivation. The largest area—226,834 acres—was cropped in 1903, and since that year there has been a gradual decrease. The yield per acre is somewhat variable, ranging from 15·1 bushels in 1902 to 34·3 bushels

in 1893, and generally the tendency has been for the average to decrease, owing to the reduction of the area in the coastal districts, where the average yield is highest. In the most favourable localities yields of 80 to 100 bushels per acre are by no means uncommon. There are probably few places better suited for the growth of maize than the coastal districts of New South Wales.

Until 1890 the State produced more maize than could be locally consumed, and exported a small quantity to her southern neighbours, but every year since, with one exception, there has been a net import ranging from 9,883 bushels in 1898 to 1,476,704 bushels in 1903. Practically nothing has been done to develop an oversea export trade, although maize is apparently growing in favour in the United Kingdom and Europe:—

Year.	Net import of maize	Year.	Net import of maize.
	bushels.		bushels.
1898	9,883	1903	1,476,704
1899	357,401	1904	366,758
1900	380,638	1905	353,002
1901	210,569	1906	805,257
1902	1,218,668	1907	892,995

This experience of a net import each year reveals a disregard for the potentialities of the State, and is not easily explained. There is no doubt that the uncertainty as to the price that will be realised for maize, an uncertainty which is shared with all produce grown only for local consumption, has caused the cultivation of this cereal to go out of favour on the coast and tableland, while on the other hand the profit to be obtained from dairying has led to its further neglect. Another possible reason for the decline is the small attention that has been paid to the cereal. During recent years wheat has received very close study as to the kinds suited to various localities and climatic conditions, and as to improvements in cultivation and harvesting, but maize has received little, if any, consideration. The falling tendency of the average yield shows also that the land has been drawn upon to too great an extent, and emphasises the need for closer attention to the question of fertilisation.

#### OATS.

The cultivation of oats has been much neglected in New South Wales, though the return has been fairly satisfactory, and the deficiency between the production and the consumption is very considerable. The elevated districts of Monaro, Argyle, Bathurst, and New England contain large areas of land where the cultivation of oats could be carried on with good results.

This cereal is cultivated as a grain crop, principally in the wheat-growing districts; and as it is essentially a product of cold climates, it thrives best in those parts of the country which have a winter of some severity. The principal districts where oats are grown are the tableland, the South-western Slope, and Riverina. The area under crop for grain in 1907 was 75,762 acres, which produced 851,776 bushels, or 11·2 bushels per acre. The northern tableland gave the best average, with 27·9 bushels per acre. In the tableland division 15,187 acres were under crop, which yielded 308,940 bushels, or 20·3 per acre; on the South-western Slope, 24,589 acres gave 275,576 bushels, or 11·2 per acre; while in the Riverina the production was 209,496 bushels from 28,188 acres, or 7·4 bushels per acre. These three divisions accounted for about 93 per cent. of the total production. In the remainder of the State there were only 7,798 acres under cultivation, which yielded 57,764 bushels.

The following table illustrates the progress in the cultivation of oats for grain during the last twenty years:—

Year.	Acres under oats for grain.	Production.		Year.	Acres under oats for grain.	Production.	
		Bushels.	Bushels per acre.			Bushels.	Bushels per acre.
1888	7,984	109,931	13·8	1900	29,383	593,548	20·2
1889	22,358	543,330	24·3	1901	32,245	687,179	21·3
1890	14,102	256,659	18·2	1902	42,992	351,758	8·2
1891	12,958	276,259	21·3	1903	51,621	1,252,156	24·3
1892	20,890	466,603	22·3	1904	40,471	652,646	16·1
1893	34,148	701,803	20·6	1905	38,543	883,081	22·9
1894	30,636	562,725	18·4	1906	56,431	1,404,574	24·9
1895	23,750	374,196	15·8	1907	75,762	851,776	11·2
1896	39,530	834,633	21·1	Average for 20 years ended 1907			18·8
1897	28,605	543,946	19·0				18·2
1898	19,874	278,007	14·0				
1899	29,125	627,904	21·6				

The area under oats for grain, with slight fluctuations, remained practically stationary until 1893, when over 13,000 acres were added. Since then, with variations due to the seasons, the rate has increased, and in 1907 it reached 75,762 acres. The yield varies considerably, but in a fair season exceeds 20 bushels per acre. During the last ten years the average was 18·2 bushels. The lowest yield was 8·2 bushels per acre in 1902, and the highest 24·9 bushels in 1906. In 1902 the crop almost failed owing to the unfavourable season.

The market for oats is chiefly in the metropolitan district, and the demand depends mainly on the price of maize. The production is far from satisfying the wants of the State, and large quantities are imported each year from Victoria, Tasmania, and New Zealand. The following statement shows the net import of oats during the last ten years, including oatmeal expressed in its equivalent of oats—100 bushels of oats to 1 ton of oatmeal:—

Year.	Net import of oats.	Year.	Net import of oats.
	bushels.		bushels.
1898	1,021,329	1903	1,388,710
1899	1,837,142	1904	622,304
1900	1,187,529	1905	897,775
1901	986,862	1906	636,898
1902	1,560,541	1907	786,773

It is apparent that much yet remains to be done before the State can be independent of outside assistance, but there is strong reason to believe that as agricultural settlement is developed on the northern tableland this cereal will receive more attention.

#### BARLEY.

Barley, although an important crop, is produced in comparatively small quantities in New South Wales. It has been demonstrated that barley grown in several parts of the State where the essential conditions of sweet, well-drained soil exist, is particularly suited for malting, and an effort has been made by brewers during the last few years to induce a more extensive cultivation in those districts which are best fitted for the production of the malting varieties.

During 1904 the area under barley for grain, 14,930 acres, and the yield, 266,781 bushels, or 17·9 per acre, were the largest on record. In 1907 the area was 11,890 acres, of which 9,932 were reaped for malting barley. The

greater part of this cereal is grown in the Tamworth district, on the north-western slope, the area in that district being 7,354 acres, the bulk of the product of which is for malting purposes. The other districts do not stand out prominently, there being only small areas under crop in each. The following statement shows the area under barley for grain, and the production in each year since 1888:—

Year.	Area under barley for grain.	Production.		Year.	Area under barley for grain.	Production.	
		Total.	Average per acre.			Total.	Average per acre.
	acres.	bushels.	bushels.		acres.	bushels.	bushels.
1888	3,318	36,760	11.1	1900	9,435	114,228	12.1
1889	5,440	113,109	20.8	1901	6,023	103,361	17.2
1890	4,937	81,383	16.5	1902	4,557	18,233	4.0
1891	4,459	93,446	21.0	1903	10,057	174,147	17.3
1892	4,618	91,701	19.9	1904	14,930	266,781	17.9
1893	6,113	114,272	18.7	1905	9,519	111,266	11.7
1894	10,396	179,348	17.3	1906	7,879	152,739	19.1
1895	7,590	96,119	12.7	1907	11,890	75,148	6.3
1896	6,453	110,340	17.1	Average for 20 years ended 1907...			15.4
1897	5,151	99,509	19.3				14.1
1898	4,459	64,094	14.4	„	10	„	
1899	7,154	132,476	18.5				

The area under barley varied little during the twenty years prior to 1886. In 1894 it exceeded 10,000 acres, but declined again next year. From 1895 to 1902 it fluctuated between 4,000 and 9,000 acres. In 1903 it was just over 10,000 acres, and in 1904 reached its highest point with about 15,000 acres. The yield has been only fairly satisfactory, the average ranging from 4 in 1902 to 21.9 bushels in 1886. In 1902 the crop practically failed. The average during the last ten years was 14.1 bushels per acre. When care is taken by the farmers to thresh out the grain in accordance with the requirements of maltsters, the price offered is remunerative, and there ought to be sufficient inducement for the producer to fulfil the local demand for barley which at present has to be met by importations from New Zealand. The net imports of barley and malt into New South Wales during the last ten years have been as follows:—

Year.	Net Import.		Year.	Net Import.	
	Barley.	Malt.		Barley.	Malt.
	bushels.	bushels.		bushels.	bushels.
1898	33,627	438,116	1903	223,728	304,733
1899	115,966	422,272	1904	123,680	327,818
1900	63,919	387,388	1905	21,834	275,833
1901	74,743	497,229	1906	150,582	320,835
1902	214,141	356,639	1907	136,516	408,957

#### RYE.

Rye is only a minor crop in New South Wales, the total area under cultivation for grain in 1907 being 5,268 acres, which, with the exception of 6,735 acres in 1906, is the largest ever grown. The production was 54,112 bushels, or 10.3 per acre. The average yield during the last ten years was 12.3 bushels per acre, the best year being 1903, with an average of 16.3, and the worst, 1904, with 9.6. The place filled by rye in the countries of the Old World is taken by macaroni wheat in this State. It is, however, grown either alone or in combination with leguminous crops as green food for dairy cattle. Nearly the whole of the rye for grain is grown on the tableland, principally in the central portion.

BROOM MILLET.

Broom millet is another minor crop, but at the same time valuable, the return from the fibre alone amounting to £21,160 in 1907, the average return being £21 18s. per ton. In 1907 the area under broom millet was 3,158 acres, from which 19,319 cwt. of fibre and 26,522 bushels of grain were obtained, the averages being 6·6 cwt. and 11·2 bushels respectively per acre. Particulars of this crop have been recorded only during the last eight years, and the average return during that period was 6·6 cwt. per acre. In 1900 and 1903 the averages exceeded 8 cwt. per acre. The greater part of the crop is grown in the Hunter River Valley and in the valleys of the northern coastal rivers.

HAY.

In addition to the areas threshed for grain, considerable quantities of wheat, oats, barley, and lucerne are grown, for the purpose of conversion into hay for farm stock, or chaff for town requirements. The area cut for hay is increasing, although it is to a great extent dependent on the fitness of the crops to be reaped for grain. The following statement shows the area under each crop for hay during the last six years, together with the total production and the average return per acre:—

Crop.	1902.	1903.	1904.	1905.	1906.	1907.
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AREA.

	acres.	acres.	acres.	acres.	acres.	acres.
Wheat ... ..	320,588	286,702	284,367	313,582	316,945	365,925
Oats ... ..	131,891	159,828	107,805	88,495	94,420	132,325
Barley... ..	1,782	1,242	1,285	2,397	843	937
Lucerne ... ..	37,657	48,245	42,247	33,562	45,964	43,574
Total ... ..	491,918	496,017	435,704	438,036	458,172	542,761

PRODUCTION.

	tons.	tons.	tons.	tons.	tons.	tons.
Wheat ... ..	75,892	452,484	207,439	304,714	403,109	198,230
Oats..... ..	99,069	250,930	82,166	93,522	131,355	99,865
Barley... ..	984	1,959	1,111	1,856	1,202	638
Lucerne ... ..	67,434	111,437	75,577	59,090	86,180	78,067
Total ... ..	243,379	816,810	366,293	459,182	621,846	376,800

AVERAGE PRODUCTION PER ACRE.

	tons.	tons.	tons.	tons.	tons.	tons.
Wheat ... ..	·2	1·6	·7	1·0	1·3	0·5
Oats .. ..	·8	1·6	·8	1·1	1·4	0·8
Barley... ..	·6	1·6	·9	0·8	1·4	0·7
Lucerne ... ..	1·8	2·3	1·8	1·8	1·9	1·8
All varieties .....	0·5	1·6	0·8	1·0	1·3	0·7

More than 67 per cent. of the total area under cultivation for hay is taken up by the area under wheaten hay. Until 1894 the cultivation of wheat for hay increased in a much greater ratio than that for grain. During the succeeding years, when the great expansion in wheat cultivation has taken place, there has not been much difference in the ratio of increase for grain and for hay.

Oaten hay is grown in parts of the State where the climate is not suitable for maturing the grain, but, in any case, the price obtained for the hay is usually so profitable that the cultivation of oats for threshing is neglected. The area under barley for hay is not large. Lucerne hay is always in good demand, and sells readily at remunerative prices. It gives the best return of all the crops grown for hay, the average yield during the last ten years having been 2 tons per acre, as against 1 ton of barley, 1 ton of oaten, and .9 ton of wheat. In favourable districts, where it has received proper attention, it grows so rapidly that as many as eight crops in the course of a year have been reaped, each averaging about 1 ton per acre.

A series of dry seasons in some measure accounts for the increased area devoted to hay since 1896, but the steady demand for hay and chaff, wheat as well as oaten, and the large import of this produce, fully justify an extension of its cultivation. The net imports of hay and chaff during the last ten years have been as follows:—

Year.	Net import of hay and chaff.	Year.	Net import of hay and chaff.
	tons.		tons.
1898	58,550	1903	116,241
1899	131,609	1904	22,699
1900	31,160	1905	41,890
1901	14,665	1906	68,441
1902	293,810	1907	83,586

There is a large difference between the demand for hay and the local production, most of the shortage in the supply being in the metropolitan district.

#### GREEN FOOD AND SOWN GRASSES.

The cultivation of maize, oats, barley, sorghum, millet, rye, and other cereals, as well as lucerne, rape, and grasses, for green food, has largely increased during recent years, owing to the expansion of the dairying industry. Artificial grasses have received more or less attention for many years, but it is largely in the northern and southern coastal districts where dairy-farming is carried on, that the practice of sowing grasses has been followed. There is also a considerable area sown on the central tableland, and to a less extent on the northern and southern portions, and in some parts of the Murray Valley, but in the other divisions the area is small. Twenty-eight years ago the area sown with grasses was about 80,000 acres, whereas in 1907 it had increased to 736,080 acres. The cultivation of green foods is necessary in districts where the supply of natural grasses is meagre, or where the naturally nutritious herbage has perished and been replaced by noxious weeds. In such cases, lucerne, sorghum, &c., are grown as supplementary crops. The following statement shows the increase in the area cultivated for green food and sown with artificial grasses since 1885:—

Year.	Area cultivated for green food.	Area sown with permanent grasses.	Year.	Area cultivated for green food.	Area sown with permanent grasses.
	acres.	acres.		acres.	acres.
1885	26,318	130,392	1903	77,093	552,501
1890	37,473	388,715	1904	87,718	607,997
1895	66,833	300,862	1905	95,058	627,530
1900	78,144	422,741	1906	122,914	697,631
1901	113,060	467,839	1907	260,810	736,080
1902	109,146	477,629			

Lucerne is grown in considerable quantities on the Hunter River flats, and the cultivation of this fodder is extending throughout the country, principally along the banks of the rivers on the western slope of the Dividing Range. In the far western pastoral districts attempts have been made to cultivate lucerne under irrigation, and have met with marked success. During 1907 there were 50,568 acres grown for green food, and if these be added to the area previously shown as being under hay, viz., 43,574 acres, there were altogether 94,142 acres under this form of cultivation. In the United States and Argentine, where experiments have proved that it will succeed, lucerne is superceding the indigenous grasses.

#### ENSILAGE.

Although the value of ensilage as fodder for cattle and sheep is generally acknowledged, this valuable method of preserving green foods is not so extensively practised as it should be in a country liable to long periods of dry weather, as is the case with New South Wales. The absence of fodder in dry seasons has impressed stockowners with the importance of conserving it during good seasons, and ensilage must steadily increase in favour. As closer settlement renders large grazing areas of good country more difficult to obtain, it will be found much cheaper to cultivate and conserve feed in silos than to graze over unimproved land. The quantity of ensilage made during the last three years is shown in the following table:—

Divisions.	Ensilage made.		
	1905.	1906.	1907.
	tons.	tons.	tons.
Coastal ... ..	1,414	2,667	5,621
Tableland ... ..	1,430	1,522	1,825
Western Slopes ... ..	2,250	5,115	3,681
Western Plains and Riverina ...	4,227	2,528	1,529
Western Division ... ..	.....	17	200
Total ... ..	9,321	11,849	12,856

Ensilage is now looked upon as a necessity in dairying districts where the conditions are unfavourable to winter fodder, and there has been a large increase in the quantity made in the coastal division. The quantities are very small in the western divisions, where it would seem to be most required.

#### POTATOES.

The cultivation of the potato has progressed very slowly, notwithstanding that there are many places in the State well suited for its growth. The bulk of the production is on the tableland, especially in the central portion, where, in 1907, there were 14,402 acres under cultivation. One county, Bathurst, had 10,518 acres, or nearly one-third of the whole area in the State devoted to potatoes. After the tableland, the coastal district grows the largest crop. The highest average, 2.4 tons per acre, was returned by the northern tableland, after which came the south

coast with 2·2. The following statement shows the area under cultivation, and the production:—

Year.	Area under crop.	Production.		Year.	Area under crop.	Production.	
		Total.	Average per acre.			Total.	Average per acre.
	acres.	tons.	tons.		acres.	tons.	tons.
1885	15,166	38,695	2·6	1904	23,855	48,754	2·0
1890	19,406	52,791	2·7	1905	26,374	50,386	1·9
1895	24,722	56,179	2·3	1906	36,815	114,856	3·1
1900	29,408	63,253	2·2	1907	31,917	55,882	1·8
1901	26,158	59,146	1·5	Average for 10 years ended 1897...			2·7
1902	19,444	30,732	1·6				2·2
1903	20,851	56,743	2·7	" 10 " 1907...			

The year 1894 saw a marked increase in cultivation, and the area planted in that year, 30,089 acres, was the largest up to that time. Since 1895 the area has fluctuated, reaching the maximum point with 36,815 acres in 1906. It has since declined, and in 1907 amounted only to 31,917 acres.

The average yield during the last ten years has been 2·2 tons per acre, and the highest 3·1 tons per acre in 1906. At present New South Wales has to meet a considerable deficiency by importation from the other States, chiefly Victoria and Tasmania, which amounted to 44,928 tons in 1907, or about 45 per cent. of the total consumption. The statement below shows the net import of potatoes during the last ten years:—

Year.	Net import of potatoes.	Year.	Net import of potatoes.
	tons.		tons.
1898	19,646	1903	62,083
1899	58,384	1904	73,044
1900	49,299	1905	42,118
1901	42,628	1906	32,619
1902	50,284	1907	44,928

The slow progress in the cultivation of potatoes is caused largely by the cost of carriage to market, as compared with the cheap water transport from Victoria and Tasmania. Some years ago the coast districts produced large quantities of potatoes, but the cultivation was abandoned owing to the prevalence of pests, which continually devastated the crops, and for which at the time the remedy was unknown.

#### MINOR ROOT CROPS.

The cultivation of root crops other than potatoes calls for little mention, as only 834 acres were planted with onions, turnips, mangold-wurzel, carrots, and sweet potatoes. The largest area was under onions, namely, 356 acres, which yielded 1,440 tons, or 4·1 tons per acre. The probable reason for the small attention paid to the growth of onions is the uncertainty as to the price to be obtained for the product, as there is no lack of soil suited to its cultivation. Large importations are necessary to meet the local demand, which have been 9,694 tons per annum during the last five years.

Turnips, during 1907, gave a total production of 976 tons from 252 acres. The area under sweet potatoes was 187 acres, and the yield 1,465 tons. Mangold-wurzel showed only 20 acres under cultivation, which yielded 231 tons. In some of the more elevated dairying districts, mangold-wurzel is now being grown as winter fodder for cattle. Carrots were grown to the extent of 17 acres, which produced 41 tons. Excellent results in the cultivation of arrowroot have been obtained at the Wollongbar experiment farm near Lismore.

TOBACCO.

Tobacco growing has been established for many years in New South Wales, but the production has fluctuated to a considerable degree. Both the soil and climate of the State are well fitted for the growth of the tobacco-plant, but, as it demands for its proper cultivation special knowledge on the part of the grower, it is not as yet largely cultivated.

Originally the plant was cultivated chiefly in the agricultural districts of the county of Argyle and the Hunter River Valley, but it has now been entirely abandoned there, and the little that is grown is found in the northern and southern portions of the western slope and on the central tableland. The following statement shows the cultivation of tobacco during the last ten years:—

Year	Area.	Production.		Year.	Area.	Production.	
		Total.	Average per acre.			Total.	Average per acre.
	acres.	cwt.	cwt.		acres.	cwt.	cwt.
1898	1,405	12,706	9.0	1905	809	7,327	9.1
1899	546	6,641	12.2	1906	601	5,371	8.9
1900	199	1,905	9.6	1907	533	3,438	6.5
1901	182	1,971	10.8	Average for 20 years ended 1907			10.0
1902	317	2,604	8.2				9.2
1903	407	5,320	13.1				
1904	752	5,015	6.7	" 10 " " 1907			

For seven or eight years prior to 1888 the area under cultivation grew steadily, until in that year it reached the highest figure it has ever attained, namely, 4,833 acres. As however, the local product did not compare favourably with the American leaf, it could not be exported profitably, so that a large proportion of the crop remained upon the farmers' hands, and as the quantity sold realised very unsatisfactory prices, many growers abandoned the cultivation of tobacco in favour of other crops. With the accumulation of stocks of leaf, and the fall in the price of the local product, the area under the plant and the resultant yield declined rapidly, until in 1894 the acreage was only 716. During the next two years there was a little more activity, and the area increased to 2,744 acres in 1896; it, however, fell away again after that year, and in 1901 amounted to only 182 acres. During the next three years the area again increased, owing to the increased attention paid to the curing of the leaf. One large firm of tobacco manufacturers two years ago endeavoured to stimulate the industry by offering good prices for suitable leaf.

Since few countries are better favoured than this State with climate and soil necessary for successful cultivation, it is a matter for regret that the industry has not made more satisfactory progress. This has been due partly to the producer, and partly to the market. With an improvement in the quality of the leaf, the local consumption could be rapidly overtaken and an export trade promoted. Tobacco of excellent quality has been produced, but the bulk of it is now grown by the Chinese, who consider weight before quality, and an inferior leaf is the consequence. There is, therefore, ample scope for improving the quality of the product sufficiently to satisfy the local consumer.

An impression has prevailed that it is not possible to produce tobacco of high quality in New South Wales. This probably arose from experience of a product grown in unsuitable soil, and carelessly cultivated. During recent years excellent tobacco has been grown at Ashford, and in

the Inverell district generally, under the guidance of a departmental expert, proving that it is possible to grow in the State a tobacco well suited to the most fastidious market, and if a regular supply were available, properly fermented and packed, a large trade might be developed.

#### SUGAR CANE.

Sugar-cane was grown as far back as 1824, but it was not until 1865 that anything like systematic attention was given to the matter. In that year experiments were carried out on the Clarence, Hastings, Manning, and Macleay Rivers which on the whole proved successful, and were followed by more extensive planting. The Macleay may be considered as the principal seat of the industry during its earlier stages; but it proved to be unsuitable to the growth of the cane, and the risk of failure from frosts compelled the planters to keep more to the north. In a few years the richest portions of the lower valleys of the Clarence, the Richmond, the Tweed, and the Brunswick, were occupied by planters. Mills were erected in the chief centres of cane-cultivation, and cane-growing and sugar-manufacturing are now well-established industries in the north-eastern portions of the State. Although frosts are sometimes experienced in this region, the soil and climate of the valleys of the northern rivers are in most respects well adapted to successful cultivation, and it is confined principally to the valleys of the Richmond, Tweed, and Clarence Rivers.

The following table shows the progress of this industry since 1863, when only 2 acres were recorded as under cultivation. As sugar-cane is not productive within the season of planting, the area under cultivation has been divided, as far as practicable, into productive and non-productive, the former representing the number of acres upon which cane was cut during the season, and the latter the area over which it was unfit for the mill, or allowed to stand for another year. Taking one year with another the area cut for cane represents about one-half of the total area planted.

Year.	Area.			Production of cane.	
	Productive.	Non-productive.	Total.	Total.	Average per acre.
	acres.	acres.	acres.	tons.	tons.
1863	.....	.....	2	.....	.....
1864	.....	.....	22	.....	.....
1865	.....	.....	141	.....	.....
1870	1,475	2,607	4,082	.....	.....
1875	3,654	2,800	6,454	.....	.....
1880	4,465	6,506	10,971	121,616	27.2
1885	9,583	6,835	16,418	239,347	25.0
1890	8,344	12,102	20,446	277,252	33.2
1895	14,398	18,529	32,927	207,771	14.4
1900	10,472	11,642	22,114	199,118	19.3
1901	8,790	12,019	20,809	187,711	21.4
1902	8,899	11,402	20,301	183,105	20.6
1903	10,405	9,814	20,219	227,511	21.9
1904	9,772	11,753	21,525	199,640	20.4
1905	10,313	11,492	21,805	201,998	19.6
1906	10,378	10,202	20,580	221,560	21.3
1907	9,916	8,087	17,953	277,390	28.0

The figures contained in the above table show the gradual progress of the sugar-growing industry from the small beginnings of 1863. From the starting point of this cultivation there was but one single break (that of 1875) in the yearly increase of land put under cane until 1884.

During the four succeeding years there was, however, a retrograde tendency, and the area cultivated in 1888 was less by 2,236 acres than that cultivated in 1884. The low price of the product and the disturbed state of the markets of the world a few years ago forced the sugar manufacturers to correspondingly reduce the price offered for the cane, and so caused, for a time, the abandonment of this cultivation by the small farmers, who found in the growth of maize less variable results for their labour.

In 1889 there was an increase in the area under cane of 1,213 acres, and the next six years saw further increases, until the largest area ever recorded, 32,927 acres, was seen in 1895. In 1895 alterations were made in the Customs tariff as regards sugar, and also about that time there were great developments in the dairying industry on the northern rivers, both of which attracted attention from sugar-planting. After 1895 the area under cane steadily declined for five years, until in 1900 there were only 22,114 acres under cultivation. From 1900 the area remained practically stationary at a little over 20,000 acres; in 1907 there were 17,953 acres under cultivation. In 1896 the highest production of 320,276 tons of cane was obtained; but the average production per acre was only 17·6 tons—with the exception of that of 1895 and of 1884, the lowest on record. The cane disease which was prevalent, principally on the Clarence, caused the low averages during the period 1894-96, and in 1895 the crop was further damaged by frost. The comparatively low yields of 1898-1900 were due to unfavourable seasons. The area of cane cut during 1907 was 9,916 acres, with a total yield of 277,390 tons, or an average of 28 tons per acre. During the last ten years the average has been 21 tons per acre, and during the last five years 22·2 tons per acre.

The county of Rous is the principal centre of cultivation, containing 494 holdings, covering 9,768 acres, devoted to the production of sugar—an area equal to more than half the total acreage in the State under cane crops. The yield obtained in 1907 from 5,267 acres of productive cane amounted to 145,170 tons, showing an average of 27·6 tons per acre. In the county of Clarence there are 441 holdings on which cane is grown, the aggregate area being 5,793 acres. In this, as in the other sugar-growing counties, the majority of the farmers cultivate sugar-cane in addition to other crops, or in conjunction with dairying, and only a few estates are devoted entirely to its production. Some planters have areas of 25 to 100 acres in extent under cane; but their number is limited. The yield in the County of Clarence last season was 86,282 tons, or an average of 27·9 tons per acre, cut on an area of 3,089 acres. In the county of Richmond the holdings under sugar-cane number 126, and aggregate 2,392 acres, of which 1,560 acres were cut, giving a total yield of 45,938 tons of cane, or an average of 29·4 tons to the acre.

Sugar-cane is generally cut in the second year of its growth, the fields being replanted after they have given crops for three or four seasons; and as the planting of cane has been conducted at irregular intervals, the seasons of large production have sometimes been followed by small crops in the succeeding year. Sugar manufacturers invariably purchase the year's crop of cane standing, and cut it at their own cost. From plantations in full bearing the average weight of the cane cut varies from 25 to 32 tons, and the value received by the grower, exclusive of bounty on sugar grown by white labour, is about 12s. 6d. per ton. Until recently the field work on the sugar plantations of New South Wales was performed entirely by white labour, and even in 1901, when the Federal legislation in connection with the sugar industry was passed, the number of blacks employed was not large. At the Census of 1901 there were 239 Hindoos and 291 natives of the Pacific Islands working on the plantations.

The duty on imported cane sugar is £6 per ton, while the excise duty is fixed at £4 per ton; but a bounty of 6s. per ton of cane, calculated on cane giving 10 per cent. of sugar, is allowed on Australian sugar grown by white labour, the bounty being paid to the grower. In 1911 and 1912 the rates will be respectively two-thirds and one-third of those just mentioned. The cost of growing may be counted at 2s. 11d. to 3s. 5d. per ton of cane for white and black labour, respectively, and about 10 per cent. of the sugar grown is cultivated by black labour. The following statement shows during the last six years the area cultivated and the sugar produced by white and black labour, respectively, and also the total amount of bounty paid each year:—

Year.	Area cultivated by—			Sugar produced by—			Amount of bounty.
	White labour.	Black labour.	Total.	White labour.	Black labour.	Total.	
	acres.	acres.	acres.	tons.	tons.	tons.	£
1902	21,591	2,466	24,057	19,434	1,526	20,960	36,333
1903	22,076	2,503	24,579	19,236	2,561	21,797	40,154
1904	19,114	2,411	21,525	17,812	1,838	19,650	36,107
1905	19,612	2,193	21,805	18,019	1,964	19,983	36,234
1906	18,645	1,956	20,601	21,805	1,613	23,418	42,789
1907	15,164	1,613	16,777	28,247	934	29,181	78,080

The figures in the above table are supplied by the Customs Department, and it will be seen that they differ as regards the area cultivated from those in the preceding table. The figures of the two departments agree as to the area cut for cane, but differ as regards the area uncut. It is difficult to state the reason, but it is due probably to different methods and times of collecting the information.

#### GRAPE VINES.

In almost every part of the State, with the exception of the sub-tropical portion and the higher parts of the mountain ranges, grape-vines thrive well, and bear large crops, equal in size, appearance, and flavour to the products of France, the Rhinelands of Germany, and Spain. The principal vineyards are situated in the valleys of the Murray and Hunter Rivers, where considerable expense has been incurred to introduce skilled labour, and to provide manufacturing appliances of the most approved kinds. The vine-growing and wine-manufacturing industries are, however, in their infancy, but with a growing local demand, and with the opening up of a market in England, where the wines of New South Wales have gained appreciation, the future of grape culture in this country appears to be fairly assured. At present the production is comparatively insignificant, as shown in the following table:—

Year.	Total area under vines.	Area under vines for wine-making only.	Production.		Year.	Total area under vines.	Area under vines for wine-making only.	Production.	
			Total.	Average per acre.				Total.	Average per acre.
	acres.	acres.	galls.	galls.		acres.	acres.	galls.	galls.
1860	1,584	622	99,791	160	1902	8,790	5,041	806,140	160
1865	2,126	1,243	168,123	135	1903	8,940	5,101	1,086,820	213
1870	4,504	2,371	342,674	145	1904	8,840	5,298	928,160	175
1875	4,459	3,163	831,749	263	1905	8,754	5,279	831,700	157
1880	4,800	2,907	602,007	207	1906	8,521	4,951	1,140,000	230
1885	5,247	2,876	555,470	193	1907	8,483	4,644	778,500	168
1890	8,044	3,896	842,181	216	Average for 10 years ended 1897 " 10 " 1907				
1895	7,519	4,390	885,673	202					
1900	8,441	4,534	891,190	197					
1901	8,606	4,889	868,479	178					

The production has increased slowly during the period under review, the total area planted being now 8,483 acres, of which 4,644 acres yielded 778,500 gallons. The total number of vineyards in 1907 was 1,723.

The average area of each vineyard was 4.9 acres, and the area planted with vines still in an unproductive state was 733 acres. Vignerons consider 250 gallons per acre a good yield; but the average yield for New South Wales reached this figure only in one year since the establishment of the industry, viz., in 1875, with 263 gallons. The average yield in 1907 was 168 gallons per acre, and during the last ten years 182 gallons. The best yield during the last twenty years was in 1891, when it was 237 gallons per acre.

Notwithstanding the acknowledged excellence of our wines, the export for the State has not yet reached an important figure. Among other causes which retard the acceptance of Australian wines by English markets may be mentioned the practice of shipping the product at too early an age, and the impossibility of obtaining from the shippers details respecting the vintage of any particular wine. Foreign experts also find fault with the method of casking; and there is no doubt that much of the success of New South Wales as a wine-exporting country will depend on the adoption of more advanced methods, and the enterprise of the vignerons in properly advertising their productions, and bringing them sufficiently before the notice of the British public.

In the following table will be found particulars of the export trade in wine locally produced, for the eight years extending from 1900 to 1907:—

Year.	Export.	Year.	Export.
	gallons.		gallons.
1900	28,324	1904	42,852
1901	39,651	1905	47,471
1902	95,799	1906	75,661
1903	53,193	1907	128,946

The wine industry is hampered in its development by such drawbacks as phylloxera and anthracnose, or "black spot." Phylloxera has caused some damage in the Camden, Seven Hills, and Parramatta districts, and some alarm exists among wine-growers touching its development in the future. The affected areas are fortunately confined to isolated patches.

The desire of the Government to extend the application of the most scientific methods in connection with wine-making and the general cultivation of the vine, and to successfully combat the phylloxera disease, has led to the appointment of an expert from one of the European Viticultural Colleges. Under his direction inspectors have been constantly engaged vigorously dealing with infected vineyards, while a Viticultural Station has been established at Howlong, near Albury, for the propagation of resistant stocks, and for the carrying out of various experiments in connection with wine-growing.

The culture of grapes is not restricted to the production of fruit for the purposes of wine manufacture only, for a considerable area is devoted to the cultivation of table-grapes, particularly in the neighbourhood of Sydney, and in Ryde, Parramatta, and other districts of Central Cumberland. The extent of country devoted to this branch of the industry in 1907 comprised 2,990 acres, with a production of 2,978 tons of grapes, giving an average of 1 ton of fruit per acre.

Although there is a large local demand, and a possibility of an export trade for raisin fruits, no extensive effort has so far been made in that direction. In 1907 there were 116 acres cultivated for drying purposes, and the yield was 901 cwt. At the Wagga and Hawkesbury experimental vineyards, raisins and sultanas are dried every season and placed on the local market, where they are regarded as equal in every respect to the imported article.

#### ORCHARDS.

The cultivation of fruit does not receive the attention it deserves, although the soil and climate of large areas throughout the State are well adapted to fruit-growing. With these areas and with climatic conditions so varied, ranging from comparative cold on the high lands to semi-tropical heat in the north coast district, a large variety of fruits can be cultivated. In the vicinity of Sydney, oranges, peaches, plums, and passion-fruit are most generally planted. On the tableland, apples, pears, apricots, and all fruits from cool and temperate climates thrive well; in the west and south-west, figs, almonds, and raisin-grapes would grow; and in the north coast, pineapples, bananas, and other tropical fruits grow excellently.

The cultivation of citrus fruits has been largely undertaken in the districts surrounding the metropolis. The first orange groves were planted near the town of Parramatta, and soon spread to the neighbouring districts of Ryde, Pennant Hills, Lane Cove, the whole of Central Cumberland, the valleys of the Hawkesbury and Nepean Rivers, and the slopes of the Kurrajong Mountains. Statistics relating to this branch of fruit-culture since 1890 are shown in the subjoined statement:—

Year.	Area under cultivation.			Production.	
	Productive.	Not yet bearing.	Total.	Total.	Average per acre.
	acres.	acres.	acres.	cases.	dozen.
1890	8,737	2,551	11,288	770,800	1,058
1895	8,759	3,197	11,956	496,245	680
1900	11,013	3,952	14,965	540,523	589
1901	11,670	4,091	15,761	604,546	622
1902	12,550	3,657	16,207	424,366	406
1903	13,418	3,310	16,728	653,462	584
1904	14,486	2,918	17,404	659,865	547
1905	15,054	2,795	17,849	738,744	589
1906	15,173	2,582	17,755	653,124	516
1907	16,430	2,087	18,517	1,079,768	789

In 1878 the area under oranges and lemons was 4,287 acres; in 1907 this had increased to 18,517 acres, of which 16,430 were productive. The production was equal to 789 dozen per acre—during the last five years the average yield being 609 dozen, as against 584 dozen during the preceding five years. It is estimated that over 3,000 dozen of fruit to the acre can be obtained in an average season from fair-sized trees in full bearing, and it is, therefore, probable that the figures returned by the growers include the production of a considerable number of young trees. The number of orangeries cultivated during the year 1907 was 2,482, and of these, the average area was 7.5 acres.

The production of oranges has already attained such proportions that the growers are obliged to seek markets abroad for the disposal of their crop, as the demand, both in New South Wales and in the adjacent States, is in some seasons exceeded by the supply. The principal market outside

Australia is in New Zealand. Efforts have been made to establish a trade with the United Kingdom, but for various reasons, they have not altogether met with success. However, in view of the success that has been attained in other countries in carrying these fruits long distances by sea, there is reason to hope that the present difficulties may be overcome.

The following table shows the area under orchards and fruit-gardens, exclusive of orangeries, together with the total value of each year's yield, since 1890:—

Year.	Area of productive fruit-gardens and orchards.	Area of fruit-gardens and orchards not bearing.	Total area cultivated for fruit-gardens and orchards.	Total value of the production of fruit-gardens and orchards.	Approximate average value per acre.
	acres.	acres.	acres.	£	£ s. d.
1890	16,081	6,274	22,355	213,934	13 6 0
1895	20,635	8,145	28,780	130,735	6 7 0
1900	25,766	5,503	31,269	270,081	10 10 0
1901	27,044	5,302	32,346	155,579	5 15 0
1902	27,161	4,216	31,377	173,535	6 8 0
1903	27,576	4,012	31,588	211,318	7 13 0
1904	26,196	3,740	29,936	162,670	6 4 0
1905	25,189	3,577	28,766	189,195	7 10 0
1906	24,708	3,714	28,422	230,135	9 6 0
1907	23,992	4,205	28,197	153,110	6 8 0

There has been but little increase in the area under orchards and fruit gardens. Since 1889 the increase has been 9,330 acres, but since 1896 there has been a decrease of 4,358 acres. About half the area under orchards is in the country of Cumberland, the actual acreage in 1907 being 10,273. From 1889 to 1892 the average production was valued at from £12 to £13 per acre, but during the last five years the average has been only £7 8s. per acre.

The fruit-production of New South Wales, with the exception of oranges, is still far behind the demands of local consumption. The State is, therefore, obliged to import large quantities, the greater portion of which could be successfully grown within its own boundaries. Leaving out of the question the considerable importations of tropical fruits from Fiji, the South Sea Islands, and Queensland, the introduction of fruit from abroad is still greatly in excess of the possibilities of local production.

The following statement shows the imports of fresh fruits during each of the last three years, and the exports of locally-grown fruit. The exports are almost entirely to the other States and New Zealand, and the imports chiefly from Italy and the United States, Victoria, and Tasmania.

Fresh Fruits.	Imports.			Exports (domestic produce).		
	1905.	1906.	1907.	1905.	1906.	1907.
	centals.	centals.	centals.	centals.	centals.	centals.
Apples ... ..	228,966	133,843	166,442	30,096	19,029	34,432
Oranges and Lemons	23,133	24,198	25,685	156,808	141,782	205,966
Other ... ..	168,732	85,373	166,275	93,804	61,198	49,630
Pulped ... ..	307,429	20,167	15,387	249	1,247	223

In addition to the above there were large imports of jams and canned fruits. In 1907 the value of the net import of fruit commodities, jams, fresh fruits, preserved fruits, &c., was £329,947, a sum which is far too large, considering the State's natural advantages of soil and climate.

## MARKET-GARDENS.

In 1907 there were in the State 3,324 holdings, comprising 10,052 acres, cultivated as market-gardens, the average size of each garden being 3 acres. The value of the production for the year was set down at £262,786. About half the area laid down to market-gardens is in the county of Cumberland. Until recent years, market-gardening was almost entirely in the hands of the Chinese, but during the last seven years it has received a good deal of attention from European farmers in the districts in the vicinity of the metropolis.

The subjoined statement gives the number, area, and value of production of market-gardens in various years since 1890 :—

Year.	Market-gardens.	Area.	Value of production.	
			Total.	Average per acre.
	No.	acres.	£	£ s. d.
1890 ... ..	*	5,098	192,597	37 15 7
1895 ... ..	2,297	6,899	170,115	24 13 2
1900 ... ..	2,266	7,764	189,448	24 8 0
1901 ... ..	2,215	7,834	208,040	26 11 1
1902 ... ..	2,263	8,263	218,612	26 9 1
1903 ... ..	2,559	8,754	213,412	24 7 7
1904 ... ..	2,783	8,827	225,400	25 10 8
1905 ... ..	2,842	9,119	242,405	26 11 8
1906 ... ..	3,437	9,550	250,905	26 5 5
1907† ... ..	3,324	10,052	262,786	26 2 10

\* Not available. † Including green peas cultivated on farms.

One branch of gardening—tomato culture—has not yet received that attention which its importance warrants. As the cultivation entails light labour, and is particularly remunerative, the vegetable could be grown by persons unaccustomed to heavier labour on farms, and it is surprising that the industry should have been so long neglected. In 1907 there were 417 acres under cultivation for tomatoes, which yielded 29,570 cases, or 71 cases per acre.

## MINOR CROPS.

In addition to the crops already specified, there are small areas under various kinds of products—as, for instance, pulse and gourd crops.

*Pulse.*—During the year 1907 there were 237 acres under crop to peas and beans, which gave a total yield of 3,645 bushels.

The peas and beans herein described were grown mainly as hard fodder for horses and pigs, and must not be confounded with the peas and beans cultivated in the kitchen and market gardens for table use as vegetables.

*Gourd Crops.*—The area devoted to pumpkins and melons during the year 1907 was 3,986 acres, and the yield 12,724 tons. The principal places of cultivation are the maize districts and the metropolitan county.

Pumpkins are grown principally for table use as vegetables, and melons for preserves; but they are also used extensively as fodder for cattle and pigs. The number of acres under gourd-vines mentioned above is somewhat below the truth, as crops of pumpkins and melons are sometimes raised in orchards and vineyards amongst the fruit-trees and vines, and particulars respecting the production are not returned.

Other branches of agriculture have hardly been considered, although, no doubt, as the rural population increases, their importance will be more recognised, and even now there are indications that more attention is

being paid to them. Little has been attempted in the cultivation of any of the following, although experiment has proved that they can all be raised in the State, namely, olives, castor-oil plant, flax, ramie fibre, hops, silk, coffee, and cotton. The varieties of the soil and climate of the State are so great that almost any kind of produce can be raised, and there is every reason for hope for the future.

The olive has been successfully grown in South Australia, and could be cultivated in districts with suitable temperature in New South Wales.

The castor-oil plant grows luxuriantly in the humid coastal districts.

One of the most valuable of crops is flax, and it is a matter of surprise that more persistent efforts have not been made to introduce it.

Hops are but little cultivated in New South Wales, although a few very small crops are picked in the neighbourhood of Orange. Other districts adapted for its cultivation are Armidale, Goulburn, and Cooma.

#### IRRIGATION.

Although there is an immense area of the State which possesses the requisite rainfall and the quality of soil necessary for the successful growing of crops, the area suitable for cultivation could be greatly increased under proper schemes of water conservation and irrigation. These essentials have long attracted considerable attention, and much valuable information has been obtained regarding the supply of water, the storage capacity of basins, and the areas suitable for irrigation. Hitherto operations have been confined chiefly to tapping the artesian supply for the purpose of obtaining water for domestic use and for stock, but schemes with far greater scope are now being undertaken to conserve the waters of the inland rivers.

The most important of these is the scheme to utilise the Murrumbidgee waters by the erection of a huge storage dam at Barren Jack, and the diversion of water to serve the land between the Murrumbidgee and Lachlan valleys. The cost of the work is estimated at £1,574,000. The site of the dam below the confluence of the Murrumbidgee and Goodradigbee rivers affords exceptional facilities for storage of the flood waters, the catchment area being 5,000 square miles. The depth of water at the face of the dam will be about 224 feet, and the reservoir will hold 33,613,000,000 cubic feet.

A weir is to be built about 220 miles below the dam to divert water to the land on both sides of the river. The two systems will serve about 3,000,000 acres for agricultural and pastoral purposes; but the present scheme deals only with the land on the northern side of the Murrumbidgee, and embraces an area of 1,500,000 acres.

A Government irrigation farm has been established at Yanco, with the object of ascertaining for intending settlers what cultivation is best suited to this area.

The Lachlan River is another stream which offers great facilities for the conservation of water, and investigations show that an excellent site for a storage basin exists at Wyangala—a short distance below the junction of the Lachlan and Abercrombie rivers. The catchment area is 3,200 square miles, and a dam 155 feet high would impound 12,000,000,000 cubic feet of water.

Private efforts have also been made to utilise the waters of the inland rivers for the purposes of irrigation. The most extensive private scheme is at North Yanco, where there are about 60 miles of channel supplied from Cudgell Creek, an anabranch of the Murrumbidgee. On many station properties artesian bores have been put down, but it has been found that the carbonate of soda in artesian waters, when used for

irrigation purposes, has a most injurious effect on the soil and vegetation. Experiments are being made to neutralise the effect of the alkali, and convert it into a valuable fertiliser by nitric acid. The next step will be to obtain the nitric acid cheaply by utilising the pressure power of the bores to produce it from the air.

The Water Rights Act of 1902, which is administered by the Public Works Department, has proved to be even more useful than was anticipated. Prior to its operation, dams and other works on the rivers and creeks existed on sufferance only; but now all rivers, creeks, and lakes are vested in the Minister for Works, who is empowered to grant licenses for works after making due inquiry. The security provided under the Act is stimulating the construction of irrigation works of a better class throughout the State, and the applications received up to the end of June, 1908, numbered 1,811.

The proposed works are chiefly dams for conserving water or pumping machinery for irrigation, but in a few cases the applications are in connection with dams and channels for irrigation without the aid of pumping. Irrigation settlements have been founded at Hay and Wentworth, and at the latter place pumping machinery has been erected capable of supplying water to irrigate 1,500 acres.

Under the Water Rights Act the Government has the power to construct any work for water conservation or drainage, if, after the publication of an estimate of the cost of the *Gazette*, the landowners concerned submit a petition in favour of the work, and intimate their willingness to contribute to its cost. The rates to be paid in such cases are fixed by the Local Land Board.

#### GOVERNMENT EXPERIMENT FARMS.

For the purpose of disseminating agricultural knowledge, colleges and experiment farms have been established by the Government, and lecturers are sent to agricultural centres. Attached to the Hawkesbury Agricultural College is an area of 3,551 acres, of which 1,336 were under cultivation during 1907. Accommodation is provided for resident students, the number enrolled in 1907 being 230. Theoretical as well as practical instruction is imparted by experts in every branch of agriculture; and experimental work is carried on with cereal and other crops, fertilisers are tested, analyses of soils made, and veterinary science taught. Opportunities are afforded for practice in general dairy-farming work, and instruction is imparted in cheese-making, in the management and breeding of poultry, in the rearing of bees and the preparation of honey for the market, in the killing and dressing of sheep, in the carpenter's and blacksmith's trades, in the construction of fences, and in various other mechanical trades.

Experiment farms have been established in various districts in the State, the instruction and experiments being adapted to the climatic conditions. These farms are situated at Wagga, Wollongbar, Bathurst, Berry, Grafton, Coolabah, Cowra, Glen Innes, Pera Bore, Moree, and Belmont. At the first-mentioned four, accommodation is provided for students, who receive instructions in the practical farming work suited to the respective districts. The fees are small, amounting, as a rule, to about £25 per annum, which sum covers tuition and board, while at the Hawkesbury College and the farms several bursaries are awarded to specially deserving students.

At the Wagga farm a specialty is made of growing seed wheats and fruits for drying, and of breeding dairying-stock and swine. The total area is 3,228 acres, and the area under cultivation 836 acres.

At Wollongbar, between Lismore and Ballina, experiments on a large scale with grasses for the grazing of dairy cattle have been carried on, and steps taken to assist the dairying industry, which is greatly on the increase in the district.

The objects to which the Bathurst Experiment Farm is devoted are the cross-breeding of sheep, irrigation, fruit-growing, cereal culture, and general mixed farming. The area of the farm is 695 acres, and the area under crops 424 acres.

The area of the Coolabah farm, which was established for experiments in the dry districts, is 2,282 acres. The Moree Irrigation Farm has an area of 79 acres, the Berry Stud Farm of 323 acres, and the Viticultural Nursery at Howlong of 240 acres.

Experiment plots have also been established in almost every district of the State. These plots are on private land, and are worked by the farmers themselves under the supervision of an inspector appointed by the Government.

#### • STATE ADVANCES TO SETTLERS.

Advances of money to farmers in New South Wales are made by the State, the system being similar to that of the French *Crédit Foncier*. Act No. 1, of 1899, was passed to assist settlers who were in necessitous circumstances, or who were financially embarrassed owing to the droughts. Under this Act a Board was appointed to consider applications for relief, and determine whether such relief should be granted. No advance to any settler was to exceed £200, to be repaid in ten years at 4 per cent. per annum. By amending Acts of 1902, the amount of advance was increased to £1,500, to be repaid with interest within thirty-one years. An Act was passed in 1906 by which the powers of the Advance to Settlers Board were transferred to the Commissioners of the Government Savings Bank of New South Wales; the maximum advance was fixed at £2,000, and the minimum, £50. Up to 31st December, 1907, 6,856 advances, totalling £789,334, were made to settlers, averaging £115 per loan, of which 3,200 have been repaid, leaving 3,656 advances current at that date, the average balance of principal being £116 per loan.

## PASTORAL INDUSTRY.

THE beginnings of the pastoral enterprise of this State were very humble. The whole stock of the community in 1788 consisted of 1 bull, 4 cows, 1 calf, 1 stallion, 3 mares, 3 foals, 29 sheep, 12 pigs, and a few goats; and although the flocks and herds of Australasia have not sprung from these animals alone, it is evident on how small a scale the business of stock-raising was first attempted. No systematic record of the arrival of live stock was kept in the early days of settlement; but it appears that in the period between Governor Phillip's landing and the year 1800 there were some slight importations, chiefly of sheep from India. The numbers of each class of stock at various periods up to 1850, prior to the separation of Victoria, were as follow:—

Year.	Horses.	Cattle.	Sheep.	Swine.
1788	7	6	29	12
1792	11	23	105	43
1796	57	227	1,531	1,869
1800	203	1,044	6,124	4,017
1825	6,142	134,519	237,622	39,006
1842	56,585	897,219	4,804,946	46,086
1850	132,437	1,738,965	13,059,324	61,631

In 1851 the severance of Victoria reduced the number of stock considerably; the separation of Queensland at the close of 1859 involved a further reduction, and at the end of the latter year the numbers of each kind of live stock within the existing boundaries of New South Wales were 251,497 horses, 2,408,586 cattle, 6,119,163 sheep, and 180,662 pigs. The following table shows the number of stock at the end of each decennial period from 1861 to 1901 inclusive, and for the years 1905, 1906, and 1907:—

Year.	Horses.	Cattle.	Sheep.	Swine.
1861	233,220	2,271,923	5,615,054	146,091
1871	304,100	2,014,888	16,278,697	213,193
1881	398,577	2,597,348	36,591,946	213,916
1891	469,647	2,128,838	61,831,416	253,189
1901	486,716	2,047,454	41,857,099	265,730
1905	506,884	2,337,973	39,506,764	310,702
1906	537,762	2,549,944	44,132,421	243,370
1907	578,326	2,751,193	44,461,839	216,145

Since 1891 the sheep have diminished in number to the extent of over 17,000,000, and swine by over 37,000, but the other classes of stock show increases as follow:—Horses 108,000, and cattle 622,000. In order to indicate the districts in which the changes in the flocks and herds have

taken place, the following table has been prepared, showing the number of live stock in each district at the end of various years since 1896. The returns for years prior to 1896 were compiled on a different basis, so that it is impossible to make any comparison with them; but the figures given will be sufficient to show that the chief decrease in sheep has been in the Western districts, where the ravages of drought are most keenly felt. A striking feature of the table is the large increase both of dairy and ordinary cattle in the coastal district:—

District.	1896.	1901.	1906.	1907.
<b>SHEEP—</b>				
Coastal District .. .. .	964,759	1,097,471	1,316,580	1,405,936
Table-lands .. .. .	7,036,733	8,359,069	8,842,352	9,160,446
Western Slope .. .. .	10,963,344	11,671,524	11,675,425	12,269,431
Western Plains and Riverina .. .. .	18,541,961	14,578,523	15,998,996	14,911,225
Western Division .. .. .	10,806,993	5,522,953	6,299,068	6,714,801
Unclassified .. .. .	.....	127,559	.....	.....
<b>Total .. .. .</b>	<b>48,318,790</b>	<b>41,857,099</b>	<b>44,132,421</b>	<b>44,461,839</b>
<b>ORDINARY CATTLE—</b>				
Coastal District .. .. .	612,797	667,282	836,055	944,775
Table-lands .. .. .	541,493	500,374	502,227	560,371
Western Slope .. .. .	403,294	305,789	398,250	424,184
Western Plains and Riverina .. .. .	199,817	114,327	224,677	219,606
Western Division .. .. .	68,579	41,247	93,935	95,312
<b>Total .. .. .</b>	<b>1,825,980</b>	<b>1,620,619</b>	<b>2,055,124</b>	<b>2,244,798</b>
<b>DAIRY COWS IN MILK—</b>				
Coastal District .. .. .	238,530	284,099	355,288	371,556
Table-lands .. .. .	82,487	70,224	66,745	67,422
Western Slope .. .. .	46,378	39,732	49,002	45,899
Western Plains and Riverina .. .. .	26,372	19,790	21,178	19,020
Western Division .. .. .	6,216	3,990	2,657	2,498
<b>Total .. .. .</b>	<b>400,183</b>	<b>417,835</b>	<b>494,820</b>	<b>506,395</b>
<b>HORSES—</b>				
Coastal District .. .. .	160,285	160,704	171,485	180,795
Table-lands .. .. .	115,314	112,294	110,077	117,924
Western Slope .. .. .	108,493	110,845	130,947	145,020
Western Plains and Riverina .. .. .	86,622	77,650	97,009	104,792
Western Division .. .. .	40,922	25,223	28,244	29,795
<b>Total .. .. .</b>	<b>510,636</b>	<b>486,716</b>	<b>537,762</b>	<b>578,326</b>

### SHEEP.

The suitability of the land for pastoral pursuits was undoubtedly the means of leading the infant colony of New South Wales to take its first step on the path of commercial progress; and it is interesting to trace the progress of the pastoral industry in its earliest stages and observe how steadily some of the settlers persevered, in the face of the almost insuperable difficulty of transport which existed a century ago.

By the year 1795 Captain Macarthur, one of the first promoters of sheep-breeding in New South Wales, had accumulated a flock of 1,000; but, not satisfied with the natural increase of his flocks alone, he sought also to improve the quality of their fleeces. A happy circumstance enabled him to attain his object, for in 1797 Captain Waterhouse arrived from the Cape of Good Hope with a number of very fine Spanish-bred sheep, which he sold to various stockowners. With the exception of Macarthur, however, those who secured sheep of the superior breed made no attempt to follow up their advantage, but, by scientifically crossing his new stock with the old, he gradually improved his strain, and in a few years obtained fleeces of very fine texture.

Prior to the present century, the production of the finest wool had been confined chiefly to Spain, so that woollen manufactures were necessarily somewhat restricted, and it was at this favourable period that Macarthur

arrived in England with specimens of the wool obtained from his finest sheep, proving conclusively the capabilities of Australia as a wool-producing country. In this way he opened up with English manufacturers a small trade, which, as Australasian wool rose in public estimation, gradually increased until it reached its present enormous dimensions; so that, although not the first to introduce merino sheep into Australia, there is no doubt that to him is due the credit of having been the first to prove that the production of fine wool could be made a profitable industry in this country.

As might have been anticipated, natural conditions in Australia have, in some respects, changed the character of the Spanish fleece. The wool has become softer and more elastic, and while diminishing in density it has gained in length, so that the weight of the fleece has increased. The quality of the wool, on the whole, has improved under the influence of the climate, and Australian wool is now probably the best in the world.

The following table shows the number of sheep at the close of various years, and illustrates the progress of sheep-breeding in New South Wales:—

Year.	Sheep.	Year.	Sheep.	Year.	Sheep.
1861	5,615,054	1886	39,169,304	1903	28,656,501
1866	11,562,155	1891	61,831,416	1904	34,526,894
1871	16,278,697	1896	48,318,790	1905	39,506,764
1876	25,269,755	1901	41,857,099	1906	44,132,421
1881	36,591,946	1902	26,649,424	1907	44,461,839

Divided into five periods, the ratios of increase are—

1860-70	annual increase	10·3	per cent.
1870-80	„	8·1	„
1880-90	„	4·7	„
1890-1900	decrease	3·4	„
1900-1907	increase	1·5	„

Considering the unimproved condition of the pasturage over a great portion of its area, it was apparent in 1891 that the State was overstocked, and graziers restricted the natural increase of their flocks by breeding only from the better-class ewes. In addition, the following season proved unfavourable, so that the end of the year saw a large decrease in the number of sheep depastured. The unfavourable season of 1892 was, unfortunately, the forerunner of many others, so that with the single exception of 1900, the whole of the years up to 1902 were distinctly unfavourable to the pastoral industry. The climax was reached in the last-mentioned year, which was particularly disastrous, as the number of sheep fell from 41,857,099 at the beginning of the year to 26,649,424 at its close, when the total flocks were over 35 millions less than in 1891.

The decrease in the total was accompanied by great changes in the numbers of individual flocks, and these changes may be traced in the following table, giving an approximate classification of the flocks, for various years from 1891 to 1907. In the former year there were only 13,187 holdings, but in 1907 the number had increased to 23,173, although the sheep depastured had decreased by over 17 millions. It is significant that while in 1891 there were 73 holdings which each carried over 100,000 sheep, the number in 1901 was 12, and in 1907 only 7. The sheep in flocks of over 20,000 comprised 62 per cent. of the total in 1891, but only 33 per cent. in 1907. The greatest change has occurred since 1894, when a

very large number of sheep perished, and pastoralists realised that the best method of combating droughty seasons lay in the subdivision of their large flocks:—

Year.	Size of Flocks.								Total.
	1 to 1,000.	1,001 to 2,000.	2,001 to 5,000.	5,001 to 10,000.	10,001 to 20,000.	20,001 to 50,000.	50,001 to 100,000.	100,001, and over.	
NUMBER OF SHEEP.									
1891	2,794,751	2,979,168	5,468,942	4,943,221	7,056,580	15,558,774	12,617,206	10,392,774	61,831,416
1894	2,863,963	3,050,107	5,264,700	5,114,109	6,844,167	15,125,070	10,366,501	8,348,653	56,977,270
1897	3,169,977	2,710,546	4,511,676	4,625,398	6,230,663	12,468,278	6,972,298	3,264,061	43,952,897
1900	3,471,775	3,266,364	4,725,271	4,824,604	6,206,402	10,686,291	4,564,309	2,066,475	40,020,506*
1901	3,797,114	3,560,849	5,519,008	5,210,117	6,666,429	10,552,373	4,835,547	1,588,103	41,857,096*
1902	3,988,724	2,580,865	3,867,402	3,862,638	5,329,031	5,039,100	1,297,333	684,331	26,649,424
1903	3,580,943	2,649,465	3,956,302	3,770,657	5,201,133	7,120,373	1,489,395	706,688	28,656,501*
1904	3,808,760	3,158,219	4,722,130	4,307,558	6,004,591	8,750,595	3,096,192	678,909	34,526,894
1905	4,066,162	3,787,648	5,746,793	4,580,497	6,522,915	10,001,922	3,769,240	1,081,587	39,506,764
1906	4,397,818	4,327,447	6,715,317	5,287,191	6,966,647	10,637,410	4,409,600	1,390,991	44,132,421
1907	4,712,734	4,587,219	7,245,911	5,837,076	7,388,940	9,392,069	4,359,321	938,569	44,461,839

\* Includes sheep in unclassified flocks, 208,515 in 1900; 127,559 in 1901; and 183,045 in 1903.

NUMBER OF HOLDINGS.									
1891	7,606	1,954	1,606	686	495	491	186	73	13,187
1894	8,402	2,013	1,633	716	441	478	148	60	13,891
1897	9,376	1,767	1,383	651	436	406	104	21	14,144
1900	10,646	2,152	1,462	676	431	349	67	14	15,797
1901	11,800	2,351	1,722	729	465	344	76	12	17,499
1902	14,074	1,715	1,196	534	371	168	20	6	18,074
1903	13,154	1,791	1,253	523	368	238	23	6	17,361
1904	12,732	2,146	1,498	601	429	298	48	5	17,755
1905	13,069	2,560	1,816	638	464	336	57	7	18,949
1906	13,894	2,925	2,157	757	484	357	69	11	20,624
1907	15,923	3,148	2,354	835	520	320	66	7	23,173

After allowing for the causes which naturally impede the increase, such as the demands of the meat supply, the requirements of the neighbouring States, and the losses occurring from causes other than drought, it is found that the rate of annual increase has been as high as 20 per cent., so that it is possible for the flocks of New South Wales to double themselves in about four years. Actual experience shows that such rate of increase occurred in 1904 and in several of the earlier years. During the period of five years from 1861 to 1866 there was an increase of 100 per cent.; and the flocks of the State were again doubled in the eight years from 1866 to 1874, and in the thirteen years from 1874 to 1887.

The export and import of sheep during the last ten years is shown below. The figures do not exactly represent the trade in sheep, being somewhat in excess of the truth, since sheep are often transferred from one State to another for the convenience of station-holders, or for better pasturage, as well as for business purposes:—

Year.	Exported.	Imported.	Year.	Exported.	Imported.
	No.	No.		No.	No.
1898	1,311,880	700,718	1903	761,546	1,521,278
1899	1,206,331	498,111	1904	883,156	662,691
1900	754,849	656,699	1905	1,619,842	798,028
1901	1,237,875	413,409	1906	1,951,183	1,138,626
1902	1,700,164	360,306	1907	2,475,210	1,569,767

The demand for sheep for local consumption was until recent years so small compared with the supply that it did not appreciably affect the increase of the flocks of the State. This, however, is not now the case; the annual demand for food consumption within the State is about 7

per cent. of the number of sheep depastured—equal to about three-fifths of the cast. By "cast" is meant the number at such age when it would be more profitable to send them for slaughter than to keep them, in the case of ewes for breeding, or for further growth in the case of non-breeders. The cast, expressed as a percentage of the whole of the sheep depastured, is a variable quantity, which, however, may be taken as about  $11\frac{1}{2}$  per cent. The number slaughtered for export in a frozen or preserved state, and for tallow, brings up the total slaughtered per annum to nearly 12 per cent. of the entire flocks.

The following table gives the number of sheep in each State of the Commonwealth at the end of 1907, together with the proportion of the total owned in each:—

State.	Sheep.	Proportion owned in each State.
	No.	per cent.
New South Wales ... ..	44,461,839	50·73
Victoria ... ..	14,146,734	16·14
Queensland ... ..	16,738,047	19·10
South Australia ... ..	6,873,869	7·84
Western Australia ... ..	3,684,974	4·20
Tasmania ... ..	1,744,800	1·99
Commonwealth ... ..	87,650,263	100·00

The introduction of sheep and cattle into the State was forbidden for many years owing entirely to the fear that the flocks and herds might be contaminated by scab and other diseases prevalent in other countries; but these restrictions were removed at the beginning of the year 1888, and pure-bred sheep are now imported from the United Kingdom, the United States, and Germany. So far, the breed imported has been chiefly the merino; but Lincoln, South Downs, Vermont, Shropshire, and other well-known breeds have been introduced. It is, however, to Tasmania that pastoralists chiefly look for their stud stock, several breeders in that State having made a speciality of raising merinos from the finest strains procurable in the world. The stud stock bred in the island State possess generally a fleece of strong character—an essential feature for the maintenance of weight and quality in those districts of New South Wales where the natural tendency is towards extreme fineness. The sheep imported during 1907 for breeding purposes numbered 24,059, valued at £112,239, of which 6,328, with a value of £41,639, came from Tasmania.

The various breeds of sheep in New South Wales are the Merino, Lincoln, Leicester, Downs, and Romney Marsh, and crosses of the long-woolled-breeds, principally with the merino. In addition, the Suffolk Downs sheep, which appear to be pre-eminently adapted for farming purposes and the production of a weighty lamb for the export trade, were introduced into the New England district during 1904. At the close of 1907, the respective numbers of merino, and long-woolled sheep and cross-breeds were as shown below, the figures including only those in flocks of 100 and over:—

Class of Sheep.	Rams.	Ewes.	Wethers.	Lambs.	Total.
Merino (combing)...	418,302	14,976,468	8,422,588	5,705,397	29,522,755
„ (clothing)...	119,264	4,759,390	2,688,422	2,178,972	9,746,048
Coarse-woolled ...	60,868	1,408,399	1,173,811	867,127	3,510,205
Total ... ..	598,434	21,144,257	12,284,821	8,751,496	42,779,008

Of the coarse-woolled sheep the largest proportion are Lincolns and their crosses with merino. During the last sixteen years the proportion of English and cross-bred sheep has increased considerably. Twenty-three years ago the proportion of long-woolled and cross-breds was only  $3\frac{1}{2}$  per cent., and for fully ten years after it stood at about  $2\frac{1}{2}$  per cent. In 1893 the proportion rose to 4·3 per cent., and with the development of the meat export trade it has now advanced to over 8 per cent.

The climate of New South Wales admits of stock of all kinds being left in the open air, and there is no necessity for housing them during the winter months, except on the highlands. The sheep are kept either in paddocks or under the care of shepherds, though on some stations they are both shepherded and paddocked.

The advantages of the paddocking system are numerous, and are now fully recognised by stockowners. Sheep kept in paddocks thrive well, and are less liable to foot-rot and other diseases; they grow a better fleece and the wool is sounder and cleaner; the sheep increase in size and live longer; in addition, the expenses of the station are less than if worked under any other system.

It has also been found that the percentage of lambing is higher among sheep which are paddocked. The percentage of lambs in Australia is, however, far lower than that experienced in the United Kingdom, where the ratio on account of twin lambs has been known to exceed 160 per cent., and over a series of years, amongst the Suffolk flocks, considerably exceeds 130 per cent. This result is doubtless due to the much greater care bestowed on English sheep at the lambing season. During the year 1907, 18,086,366 ewes lambed, and the lambs marked numbered 10,109,686. The total increase of sheep in the State was 329,418, the details of which are summarised below :—

Sheep on 31st December, 1906	...	...	...	...	...	44,132,421
Lambs marked during 1907	...	...	...	...	...	10,109,686
Sheep imported during 1907	...	...	...	...	...	1,569,767
						<hr/> 55,811,874
Slaughtered for local consumption (excluding sheep killed on stations and farms)	...	...	...	...	...	1,681,729
Slaughtered for food on stations, &c.	...	...	...	...	...	1,119,635
" for meat preserving...	...	...	...	...	...	554,072
" for freezing for export	...	...	...	...	...	1,355,121
" for boiling-down	...	...	...	...	...	171,649
Lambs slaughtered for local consumption	...	...	...	...	...	302,851
						<hr/>
Total slaughtered, 1907	...	...	...	...	...	5,185,057
Exported during 1907	...	...	...	...	...	2,475,210
Loss by ordinary mortality, drought, dogs, and missing sheep	...	...	...	...	...	3,689,768
						<hr/>
Total deduction	...	...	...	...	...	11,350,035
						<hr/>
Sheep on 31st December, 1907	...	...	...	...	...	44,461,839
						<hr/>
Increase on previous year	...	...	...	...	...	329,418

## WOOL.

The wool-clip of New South Wales is its most important item of production, and the prosperity of the State in a large measure depends upon the wool market. The following table shows the export trade in New South Wales wool in quinquennial periods since 1860, and illustrates the growth of this important industry during the forty-eight years. The weights given represent the actual exports, washed and greasy wool being taken together :—

Period.	Quantity.	Total Value.	Period.	Quantity.	Total Value.
	lb.	£		lb.	£
1860-1864	95,792,401	8,635,588	1890-1894	1,530,993,123	48,925,721
1865-1869	172,503,856	12,362,527	1895-1899	1,282,457,338	44,108,894
1870-1874	301,441,632	19,778,734	1900-1904	1,071,168,177	41,765,325
1875-1879	525,964,323	28,687,368	1905	266,359,306	12,362,515
1880-1884	802,842,533	37,175,364	1906	291,183,294	14,186,562
1885-1889	1,056,290,069	42,896,802	1907	332,363,433	17,241,213

These figures do not show the production clearly; neither can the fluctuations in the market value be ascertained from them, as the relative quantities of greasy and washed wool vary each year. In order to indicate clearly the production, washed wool should be stated as in the grease. This has been done for the purposes of the following table, and, adding to the exports already shown the quantity of wool used locally in woollen mills, the total production, stated as in the grease, was as follows :—

Period.	New South Wales Wool.—Quantity.			Value.		
	Exported.	Used locally.	Total production.	Exported.	Used locally.	Total.
	lb.	lb.	lb.	£	£	£
1876-1880	713,518,500	4,878,500	718,397,000	31,076,350	222,248	31,298,598
1881-1885	939,605,700	4,208,300	943,814,000	40,381,381	181,711	40,563,092
1886-1890	1,290,919,900	3,861,100	1,294,781,000	44,641,559	130,821	44,772,380
1891-1895	1,808,007,600	5,622,400	1,813,630,000	48,893,015	131,565	49,024,580
1896-1900	1,401,170,000	7,070,000	1,408,240,000	42,782,417	201,276	42,983,693
1901-1905	1,295,317,300	5,466,700	1,300,784,000	46,447,330	271,801	46,719,131
1906	324,605,600	835,400	325,441,000	14,072,371	26,637	14,099,008
1907	366,501,900	944,100	367,446,000	17,158,636	26,490	17,185,126

The values given in this table represent the export prices free on board, and, consequently, differ from those on a later page, which shows the values at the place of production.

In recording the exports prior to 1876 no distinction was made between washed and greasy wool, so that any attempt to estimate the production is surrounded with difficulty. From the information available, however, it would appear that the production in 1861 was 19,254,800 lb., while in 1871 the weight in grease was 74,401,300 lb. An estimate of the production for the intervening years is, unfortunately, rendered impossible owing to the fact that in several instances the greater portion of the wool clip was held over for a considerable period, awaiting an opportunity for shipment.

A consideration of these figures will at once show how greatly the prosperity of the State is affected by fluctuations in the market value of its staple export, for, taking the average annual export during the past 12 years at 280,000,000 lb., a rise of 1d. per lb. in the market price means an addition of £1,275,000. to the wealth of its people.

As the season for exporting wool does not wholly fall within the calendar year, the exports for any year consist partly of that season's clip and partly of the previous one. The following table shows the total number of sheep shorn during each year since 1891 :—

Year.	Sheep and Lambs shorn.	Year.	Sheep and Lambs shorn.	Year.	Sheep and Lambs shorn.
1891	57,702,702	1897	42,429,750	1903	26,994,870
1892	55,602,188	1898	41,220,440	1904	31,804,772
1893	51,690,109	1899	34,569,924	1905	37,145,686
1894	54,234,997	1900	38,400,241	1906	41,704,814
1895	45,695,657	1901	40,417,263	1907	40,338,700
1896	45,997,583	1902	27,639,804		

The largest number was shorn in 1891, when 17,000,000 more sheep were shorn than in 1907. Although the number has decreased since that year, the weight of the fleece has increased, as will be seen from the table given below. The figures have been taken from the annual reports of the Stock Department, but it would appear from other calculations that the averages are somewhat understated :—

Year.	Estimated Average Weight of Fleece from Sheep shorn in the grease.	Year.	Estimated Average Weight of Fleece from Sheep shorn in the grease.	Year.	Estimated Average Weight of Fleece from Sheep shorn in the grease.
	lb. oz.		lb. oz.		lb. oz.
1877	4 0	1887	5 9	1897	5 12½
1878	5 0	1888	5 6½	1898	6 0
1879	5 1	1889	5 13½	1899	6 0
1880	5 7	1890	5 11½	1900	6 13
1881	5 0	1891	5 9	1901	6 14
1882	5 0	1892	5 6	1902	5 11
1883	5 2	1893	5 15	1903	6 13½
1884	5 0	1894	6 1½	1904	6 15½
1885	5 7½	1895	5 11½	1905	7 6½
1886	5 5½	1896	6 4	1906	7 13½
				1907	7 10½

According to the returns furnished by the Chief Inspector of Stock, the average weight of fleece from each sheep during 1907 was 7 lb. 10½ oz., and from lambs 2 lb. 7 oz.

Of late years considerable attention has been given to the question of breeding, and the result is seen in the great improvement in the weight of fleeces. In spite of the bad seasons experienced, the wool clips have been very good, and notwithstanding the greatly diminished flocks, the total production of wool, though smaller than in previous years, has not by any means decreased proportionately. The improvement in the weight of fleece will be apparent from a consideration of the following table :—

Period.	Average number of Sheep depastured annually.	Average annual production of Wool.	Average yield of Wool per Sheep.
	No.	lb.	lb.
1881-85	36,020,700	188,762,800	5.24
1886-90	47,746,200	258,956,200	5.42
1891-95	56,297,400	362,726,000	6.44
1896-1900	41,949,300	281,648,000	6.71
1901-05	34,239,300	260,517,000	7.61
1906-07	44,297,100	346,443,500	7.82

From these figures it appears that the average weight during the last two years has been over  $7\frac{3}{4}$  lb. A striking proof of the increased weight of the fleece is afforded by a comparison of the figures relating to the periods ending with 1890 and 1907. In the earlier period the sheep numbered 3,450,000 more, yet the average annual production of wool was 87,487,000 lb. less than that of the later term.

Wool is put up at the stations in packs of various sizes from 4 ft. 6 in. by 2 ft. 2 in. to 5 ft. 3 in., weighing from 10 lb. to 12 lb. On many holdings the bales are "dumped" in a hydraulic press before leaving, and thus reduced to less than half their original length. During 1907-8 the average weight of a bale of greasy wool was 350 lb., and a bale of washed wool 239 lb., as compared with 356 lb. and 243 lb., respectively, during the previous year.

At one time almost all the wool was shipped on the grower's account and sold in London, but of late years fully 80 per cent. has been sold in the local markets, as purchasers have realised the advantages of buying on the spot:—

Seasons.	Total deep-sea exports (from Sydney and Newcastle).	Sydney Wool Sales.		
		Offered.	Sold at auction and privately.	Proportion of deep-sea exports sold in Sydney.
	bales.	bales.	bales.	per cent.
1887-88--1889-90	1,318,351	764,520	580,000	43·99
1890-91—1892-93	1,823,085	1,093,766	886,541	48·63
1893-94—1895-96	2,158,220	1,382,517	1,241,858	57·54
1896-97—1898-99	1,971,513	1,318,579	1,294,373	65·65
1899-1900—1901-02	1,766,922	1,330,747	1,309,915	74·14
1902-03—1904-05	1,549,598	1,232,819	1,252,817	80·85
1905-06—1907-08	2,356,811	1,969,061	1,939,916	82·31

Of the wool sold in Sydney during the last season, it may be said that approximately 430,196 bales were purchased for the Continent of Europe, 123,543 bales for the English trade and for London on speculative account, 9,292 bales for America, 8,981 bales for Japan, China, and India, and 29,801 bales by local scourers. The average prices per bale realised in Sydney and in London during the last six years are shown in the following table:—

Year.	Average Prices per Bale realised.	
	In Sydney.	In London.
	£ s. d.	£ s. d.
1902-3	12 8 8	13 2 6
1903-4	12 17 1	13 10 0
1904-5	12 17 1	14 10 0
1905-6	13 19 6	15 15 0
1906-7	14 3 0	17 0 0
1907-8	13 9 0	16 10 0

In comparing the prices of the Sydney and London markets, it should be remembered that in the former the season ends with June and in the latter with December, and also that a much larger proportion of the lower qualities of wool, such as pieces, bellies, locks, &c., are sold in Sydney. As freight and other charges amount to 25s. or 30s. per bale, it is evident that the Sydney market is the more favourable to producers.

The prices realised for the different descriptions of wool at the Sydney wool sales during the last two seasons are given below:—

Description.	Superior.		Good.		Medium.		Inferior.	
	1906-07.	1907-08.	1906-07.	1907-08.	1906-07.	1907-08.	1906-07.	1907-08.
	per lb.	per lb.	per lb.	per lb.	per lb.	per lb.	per lb.	per lb.
<b>Greasy—</b>	d.	d.	d.	d.	d.	d.	d.	d.
Fleece ..	11½ to 15½	12½ to 17½	10 to 11	11½ to 12½	8½ to 9½	9½ to 11	7 to 8½	8 to 9½
Pieces ..	10½ „ 13½	11½ „ 12½	9½ „ 10½	10½ „ 11½	8½ „ 9½	9 „ 10½	6½ „ 8	8 „ 8½
Bellies ..	8½ „ 11	9 „ 10	7 „ 8	8 „ 8½	5½ „ 6½	6½ „ 7½	4½ „ 5½	5 „ 6½
Lambs ..	10½ „ 14½	10½ „ 14½	8½ „ 10½	8½ „ 10½	6½ „ 8½	6½ „ 8	4 „ 6½	4 „ 6
<b>Crossbred—</b>								
Fine ..	11½ „ 16½	11½ „ 16½	10 „ 11½	9½ „ 11	8½ „ 9½	8½ „ 9½	7 „ 8½	6½ „ 8
Coarse ..	8½ „ 9½	8 „ 9	7 „ 8	6½ „ 7½	6½ „ 7	5½ „ 6½	5½ „ 6½	4½ „ 5½
<b>Scoured—</b>								
Fleece ..	20½ „ 25	23½ „ 27½	18½ „ 20	21½ „ 23	17½ „ 18	19½ „ 21	15½ „ 17	17½ „ 19½
Pieces ..	19 „ 22½	21 „ 22½	17½ „ 18½	19½ „ 20½	16 „ 17½	18½ „ 19½	14 „ 15½	16½ „ 18½
Bellies ..	15½ „ 20	18 „ 19	13½ „ 15½	16½ „ 17½	12 „ 13½	15 „ 16½	10½ „ 11½	13 „ 14½
Locks ..	13½ „ 17½	14 „ 15½	11½ „ 13	12½ „ 13½	10½ „ 11½	10½ „ 12	9 „ 10	9½ „ 10

In order to illustrate the fluctuations in value, the following table has been compiled, which gives a fairly correct idea of the average value realised for greasy wool in the London market at each of the principal sales during the last ten years:—

Year.	1st Series.	2nd Series.	3rd Series.	4th Series.	5th Series.	6th Series.
	per lb.	per lb.	per lb.	per lb.	per lb.	per lb.
	d.	d.	d.	d.	d.	d.
1899	8½	8½	9½	10½	11½	13
1900	11½	10½	9½	8½	7	...
1901	8½	8	8½	8½	9½	...
1902	10½	10½	11½	11½	12	12½
1903	12½	12	11½	11	11	10½
1904	11	10	10½	11	11½	12
1905	12	11½	12½	12½	12½	12½
1906	12	12½	12½	12½	12	12½
1907	12½	12½	12½	12½	12½	11½
1908	11½	10	9½	10½	10½	11½

During the period covered by the foregoing table, Sydney-shipped greasy wool realised from 13d. to 7d. The maximum prices were realised during 1899, when the sales closed at 13d. per lb. The 1900 sales opened at 11½d., but gradually fell to 7d. at the end of the year. The prices rose gradually to 9½d. at the close of 1901, and in the succeeding year to 12½d. In 1903 there was a gradual fall to 10½d., but at the last sales in 1904 prices again reached 12d. This value was more than maintained during the next three years. During 1908 the value fell to 9¾d., but rose to 11¼d. at the close of the year.

#### CATTLE.

Though still a very important industry, cattle-rearing does not now occupy so prominent a position as formerly. The number of cattle returned at the close of various years since 1861 as per the subjoined table, shows that there was a great decline in the total from 1876 to 1886, that the number steadily increased from 1886 to 1896, when it stood at 2,226,163, and then owing to unfavourable seasons the numbers decreased until in 1902 the total was only 1,741,226. Within the last four years

there has been a decided recovery, and the number at the close of 1907 was 2,751,193.

Year.	Cattle.	Year.	Cattle.	Year.	Cattle.
1861	2,271,923	1886	1,367,844	1903	1,886,578
1866	1,771,800	1891	2,128,838	1904	2,149,129
1871	2,014,888	1896	2,226,163	1905	2,337,973
1876	3,131,013	1901	2,047,454	1906	2,549,944
1881	2,597,348	1902	1,741,226	1907	2,751,193

The principal breeds of cattle now in the State are the Durham or Shorthorns, Hereford, Devon, Black-polled, Ayrshire, Alderney, Jersey, and crosses from these various breeds. At the close of the year 1907 the numbers of each breed, as far as could be ascertained, were:—

Breed of Cattle.	Pure and Stud.	Ordinary.	Total.
	No.	No.	No.
Shorthorn ... ..	72,389	523,981	596,370
Hereford ... ..	26,085	123,725	149,810
Devon ... ..	11,289	40,773	52,062
Black-polled ... ..	2,031	10,471	12,502
Red-polled .. ...	246	1,176	1,422
Ayrshire ... ..	7,926	40,792	48,718
Alderney ... ..	1,716	6,185	7,901
Holstein ... ..	543	2,677	3,220
Jersey ... ..	6,432	31,575	38,007
Guernsey ... ..	1,233	5,275	6,508
Total ... ..	129,890	786,630	916,520
Crosses (first crosses)—			
Shorthorn—Hereford ... ..	.....	294,922	294,922
„ —Devon ... ..	.....	157,372	157,372
Hereford — „ ... ..	.....	58,839	58,839
Ayrshire—Shorthorn ... ..	.....	190,182	190,182
Alderney— „ ... ..	.....	850	850
Black-polled— „ ... ..	.....	59,759	59,759
Jersey— „ ... ..	.....	36,117	36,117
Unknown ... ..	.....	601,241	601,241
Total ... ..	.....	1,399,282	1,399,282
	129,890	2,185,912	2,315,802

There were, in addition, 435,391 head not classified, which were for the most part in the towns.

There has been a comparatively large increase in the number of milking cattle, as many of the farmers in the coastal districts have turned their attention to dairying, with very satisfactory results. The number of milch cows at the close of the year 1907 was 506,395.

The breed of cattle throughout the State is steadily improving—a result due to the introduction of good stud stock; to greater attention and care exercised in selection and breeding, more particularly for dairying purposes; and to culling and keeping in paddocks. In order to encourage and assist dairy farmers in improving the breed of their cattle the Government have imported some high-class stud bulls from England, and these, or some of their progeny, may be leased for a short period at a small fee. There are now thirty-three of these bulls either

stationed at various Experiment Farms or leased to farmers in the chief centres of the dairying industry.

Importations from Europe and America were discontinued for many years owing to the natural dread of the stockowners lest their herds should contract diseases which have devastated the cattle of other countries. The prohibition was removed in 1888, and cattle are now admitted after strict quarantine. The number so admitted in 1907 was 73—29 bulls and 44 cows. In addition, a number of stud cattle were imported from the other States, principally for dairying purposes.

The breeding cows in 1907 numbered 641,387, and as there were 355,600 calves branded, the average calving was about 55 per cent., which may be regarded as satisfactory.

Australian cattle, probably because they live in a more natural state, are, on the whole, remarkably free from milk-fever and other complaints attendant on calving.

### HORSES.

Australasia is eminently fitted for the breeding of horses; and as at an early period the stock of the country was enriched by the importation of some excellent thoroughbred Arabians from India, Australian horses soon acquired a high reputation. The number in the State steadily increased from 1883 to 1894, when it stood at 518,181; but, owing to the drought, the total in 1895 fell to 499,943. In 1896 there was an increase to 510,636, attributed to increased settlement, more breeding, and fewer sales for export owing to low prices. In 1897 the number of horses was 498,034; in 1898 it was 491,553; but in 1902 it had fallen to 450,125. During the last two years there has been a substantial increase, and the number at the end of 1907 again exceeded half a million.

The following table shows the number of horses at the end of various years since 1860:—

Year.	Horses.	Year.	Horses.	Year.	Horses.
1861	233,220	1886	361,663	1903	458,014
1866	274,437	1891	469,647	1904	482,663
1871	304,100	1896	510,636	1905	506,884
1876	366,703	1901	486,716	1906	537,762
1881	398,577	1902	450,125	1907	578,326

For purposes of classification the horses of the State have been divided into draught, light-harness, and saddle horses, and the numbers of each particular kind, so far as could be ascertained, were as follow:—

Class.	Thoroughbred.	Ordinary.	Total.
Draught ...	21,592	136,318	157,910
Light-harness ...	13,721	128,526	142,247
Saddle ...	25,233	148,075	173,308
Total...	60,546	412,919	473,465

The Stock Department did not receive returns relating to the remaining 104,861 animals.

New South Wales is specially suitable for the breeding of saddle and light-harness horses, and it is doubtful whether in these particular classes the Australian horses are anywhere surpassed. On many of the large holdings thoroughbred sires are kept, and the progeny combine speed with an astonishing power of endurance. Fed only on the ordinary herbage of the country, these animals constantly perform long journeys across difficult country, and become hardy and sure-footed to a high degree. It is the possession of these qualities which gives them their great value as army remounts.

The approximate number of animals fit for market is as follows :—

Draught	...	...	...	...	...	19,185
Light-harness	...	...	...	...	...	22,381
Saddle	...	...	...	...	...	27,643
Total	...	...	...	...	...	69,209

Of these it is estimated that about 26,500 are suitable for the Indian and other markets.

A considerable number of horses are exported annually to countries outside Australasia the number in 1907 being 2,243, valued at £65,724. The total sent from the State during the year numbered 9,049, with a value of £305,107. Little notice should, however, be paid to the exports to other States of the Commonwealth and to New Zealand, as the great majority of the animals are racehorses journeying to and fro to fulfil engagements. The following table shows the export trade since 1898 :—

Year.	Country to which Exported—						Total.
	Australian States.	New Zealand.	India.	South Africa.	Japan.	Other Countries.	

HORSES—NUMBER.							
1898	4,772	492	1,983	1	.....	632	7,880
1899	7,865	335	1,111	1,200	.....	885	11,395
1900	11,395	199	1,688	7,714	.....	1,983	22,979
1901	11,282	235	998	6,300	2	943	19,760
1902	9,437	74	834	2,918	.....	664	13,927
1903	7,120	398	1,249	145	1	1,292	10,205
1904	10,181	138	1,771	169	66	1,275	13,600
1905	8,109	123	1,922	8	1,631	1,760	13,553
1906	7,229	61	1,311	49	43	971	9,664
1907	6,777	29	873	11	141	1,218	9,049

VALUE.							
1898	£ 123,814	£ 6,396	£ 26,364	£ 500	£ .....	£ 16,109	£ 173,183
1899	142,263	6,152	19,020	25,025	.....	20,632	213,092
1900	183,705	4,376	18,521	124,485	.....	57,578	388,665
1901	205,619	6,398	17,076	81,204	100	19,873	330,270
1902	191,163	1,852	15,044	38,116	.....	15,566	261,741
1903	210,437	11,849	21,309	7,775	15	31,889	283,274
1904	248,130	8,040	32,074	3,727	7,975	32,235	332,181
1905	229,318	9,688	42,774	1,780	26,495	44,227	354,282
1906	239,516	7,272	34,859	1,721	1,918	29,220	314,506
1907	236,242	3,141	20,255	524	8,585	36,360	305,107

For many years India has offered the best market for horses. The demand for horses in that country is considerable, and Australia is a natural market from which supplies are derived. Since 1904 also there has been a considerable export to Japan.

Of the exports to other countries, nearly the whole go to the Straits Settlements, New Caledonia, Fiji, or other islands in the Pacific.

## PASTORAL PROPERTY.

Pastoral property and stock form the largest portion in the wealth of New South Wales, and the return derived therefrom is the largest source of the income of its inhabitants. It is impossible to estimate satisfactorily the value of the land privately owned and devoted to pastoral pursuits, nor can any information now be obtained as to the value of improvements.

From the nature of the industry, it is difficult to arrive at a correct estimate of the return from pastoral pursuits as at the base of production; but taking the Sydney prices as a standard, and making due allowance for incidental charges, such as agistment, railway carriage or freight, and commission the value in 1907 would appear as £22,281,000. The return received from the different kinds of stock are shown in the following table, for various years since 1891:—

Year.	Annual Value of Pastoral Production.					
	Sheep for Food.	Wool.	Cattle.	Horses.	Total.	Per Head of Population.
	£	£	£	£	£	£ s. d.
1891	2,367,000	9,996,000	1,535,000	827,000	14,725,000	12 17 10
1896	1,745,000	8,619,000	990,000	420,000	11,774,000	9 5 4
1901	2,071,000	8,425,000	1,374,000	682,000	12,552,000	9 3 6
1902	1,446,000	7,152,000	1,322,000	811,000	10,731,000	7 13 10
1903	2,327,000	8,361,000	1,339,000	750,000	12,777,000	9 0 0
1904	2,206,000	9,133,000	1,347,000	687,000	13,373,000	9 4 11
1905	2,753,000	12,103,000	1,533,000	724,000	17,113,000	11 11 6
1906	3,514,000	13,792,000	1,592,000	845,000	19,743,000	13 0 9
1907	3,222,000	16,459,000	1,574,000	1,026,000	22,281,000	14 6 7

The value of production in 1907 was the highest on record, notwithstanding the fact that the number of stock depastured was not nearly so great as in some of the earlier years. It is satisfactory to note the rapid recovery which has been made since 1902. The increase in prices, especially of wool, has helped towards this recovery; but also there has been greatly increased production.

In order to exhibit clearly the extent of the variation in the prices of pastoral products, the following table has been prepared, showing the price-level in each year since 1901. The figures are calculated on the average prices of exports to the United Kingdom free on board ship at Sydney. The prices of 1901 are taken as a basis, and assumed to equal 1,000.

Article.	1902.	1903.	1904.	1905.	1906.	1907.
Wool—greasy ... ..	1,111	1,233	1,200	1,300	1,433	1,553
„ scoured ... ..	1,258	1,396	1,415	1,396	1,509	1,585
Tallow ... ..	1,170	1,045	910	937	1,031	1,303
Leather ... ..	1,017	1,067	983	1,078	1,183	1,150
Frozen Beef ... ..	1,000	1,000	813	1,000	875	1,010
„ Mutton ... ..	1,000	1,000	1,214	1,031	1,125	1,055
Skins—Hides ... ..	1,000	1,013	1,092	1,250	1,375	1,316
„ Sheep, with wool ...	1,209	1,246	1,266	1,541	2,000	1,863
All articles ... ..	1,096	1,125	1,112	1,192	1,316	1,354

## MEAT SUPPLY.

Slaughtering for food is permitted only in places licensed for the purpose, such establishments being very numerous. In the metropolitan district there are 59, and in the country districts 1,293 slaughter-yards, employing respectively 502 and 4,051 men; in all, 1,352 establishments and 4,553 men.

The consumption of meat cannot be given accurately for the metropolitan and country districts separately, as several of the largest country slaughter-yards supply the metropolitan market. For New South Wales generally, it is estimated that the average annual consumption of mutton per inhabitant is about 81 lb., of beef 137 lb., and of pork and bacon 14 lb., making a total consumption of 232 lb.

The following table shows the number of stock slaughtered during 1907:—

Stock.	Number slaughtered in 1907.		
	Metropolitan.	Country.	Total.
Sheep ... ..	1,728,296	3,153,910	4,882,206
Lambs ... ..	76,915	225,936	302,851
Bullocks ... ..	71,194	171,067	242,261
Cows ... ..	18,365	90,898	109,263
Calves ... ..	19,738	8,780	28,518
Swine ... ..	112,294	126,194	238,488

These figures represent the stock slaughtered for all purposes. Of the sheep and lambs, 3,104,215, including 1,119,635 killed on stations and farms, represent the local consumption; 554,072 sheep were required by meat-preserving establishments; 1,355,121 for freezing for export; and 171,649 were boiled down for tallow. All the cattle killed, except 5,197 treated in the meat-preserving works and 2,248 exported frozen, were required for local consumption; and of the swine, 88,985 were cured as bacon, and 149,503 killed for ordinary consumption.

The following table shows the slaughter of stock in the various establishments for ten years:—

Year.	Establishments.	Hands Employed.	Sheep.	Lambs.	Cattle.			Swine.
					Bullocks.	Cows.	Calves.	
1898	1,820	5,391	5,499,049	166,714	222,220	119,229	22,593	204,492
1899	1,798	5,158	4,603,225	192,034	244,184	114,753	25,011	202,008
1900	1,770	4,853	4,197,026	162,487	239,038	139,113	21,841	227,379
1901	1,642	4,675	4,372,016	147,117	202,795	113,374	19,654	248,311
1902	1,548	3,635	4,502,513	133,387	164,916	99,450	23,765	208,352
1903	1,702	3,991	3,180,408	96,712	157,173	103,471	14,555	178,157
1904	1,593	3,961	2,927,078	131,458	211,839	72,778	14,472	232,955
1905	1,563	4,570	3,959,577	324,054	236,306	64,833	19,713	239,096
1906	1,522	4,391	4,229,407	252,648	237,722	94,955	26,200	231,650
1907	1,352	4,553	4,882,206	302,851	242,261	109,263	28,518	238,488

The value of stock slaughtered can be determined with exactness only for the metropolitan market.

The prices of stock show great variation in the course of a year. In cross-bred sheep the average monthly values at the Homebush sale-yards during 1907 ranged from 11s. 6d. paid for medium wethers, during January to 23s. 9d. paid in August for extra prime cross-bred wethers, while in merino sheep the highest value reached was 23s. 9d., and the lowest 6s. 3d. The prices of sheep vary not only with the class and condition of the animal and the number on the market, but also in accordance with the season and the growth of the fleece. The average values of good cross-bred wethers and ewes during 1907 were 15s. and 14s. 6d. respectively; merino wethers were practically equal to cross-breds in value, but ewes were about 1s. 6d. to 2s. less valuable. Good lambs were worth about 13s. 9d. throughout the year. In cattle, the prices ranged from £15 18s. paid in September for extra prime bullocks to £5 6s. in November for medium cows. The general average for good bullocks was about £9 5s., and for good cows about £7 8s. Best beef averaged about 28s. 6d. per 100 lb. Porkers brought an average price of 34s. 6d. during the year, while baconers realised an average of 60s., going up to 69s. in September.

## THE MEAT EXPORT TRADE.

The table below shows the growth of the export trade in New South Wales meat since 1891. The export of frozen meat varies, of course, with the seasons. In regard to mutton, the State is rather at a disadvantage, as the qualities of the merino as a food are not greatly appreciated in the English market. It has been proved, however, that a great expanse of country is suited to the breeding of large-carcase sheep, and pastoralists have lately turned their attention in this direction, with a view to securing a larger share in the meat trade of the United Kingdom:—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	quarters.	carcases.	cwt.	£	lb.	£
1891-1895	.....	.....	1,495,893	986,760	67,062,284	867,028
1896-1900	204,211	5,442,044	2,685,587	1,822,139	64,606,006	1,000,153
1901-1903	91,780	1,808,613	875,166	1,041,768	27,992,773	600,433
	cwt.	cwt.	cwt.			
1904	4,201	207,721	211,922	290,065	7,251,911	135,073
1905	19,580	463,567	483,147	641,216	9,634,636	199,224
1906	33,158	512,799	545,957	655,122	5,944,333	132,729
1907	18,971	553,558	572,529	712,738	7,120,597	142,467

The following statement, compiled from the British trade returns, shows the imports of frozen mutton into the United Kingdom during the past five years, and also the quantity imported from New South Wales:—

Year.	Total Imports.		Imports from New South Wales.	
	Quantity.	Value.	Quantity.	Value.
	cwt.	£	cwt.	£
1903	4,016,622	7,826,062	37,502	73,406
1904	3,494,782	6,861,531	67,200	130,839
1905	3,811,069	7,336,490	244,033	470,482
1906	4,082,756	7,645,935	341,963	609,275
1907	4,578,523	8,687,407	391,500	723,148

Below is given a statement of the average wholesale prices obtained during the past ten years for English and frozen mutton sold in London. From an examination of the figures it would seem that the class of people requiring locally-grown mutton in England is quite distinct from that using frozen mutton :—

Year.	Best English.	New Zealand.	Australian.	River Plate.	Year.	Best English.	New Zealand.	Australian.	River Plate.
	d.	d.	d.	d.		d.	d.	d.	d.
1898	7	3½	2½	2½	1903	7½	4	3½	3½
1899	7½	3½	2½	2½	1904	7½	4½	4	3½
1900	7½	4	3½	3½	1905	7½	4½	3½	3½
1901	7	3½	3½	3½	1906	7½	4	3½	3½
1902	7	4½	3½	3½	1907	7½	4½	3½	3½

In addition to the export of frozen beef and mutton, there has grown up in the last few years a considerable trade in frozen rabbits and hares, details of which appear in the chapter on "Dairying and Minor Industries."

#### OTHER PASTORAL PRODUCTS AND BY-PRODUCTS.

The minor products arising from pastoral occupations include tallow, edible fat and lard, skins and hides, furs, horns, hoofs, bones, and hair. Some of these are more specially dealt with in the chapter on manufactories and works, and need only brief mention here.

The production of tallow has declined considerably since 1897, consequent on the decrease in the number of live stock depastured, and the falling-off in the market value of the article. In earlier years the production was much greater than for any of the years shown hereunder, for in each of the years 1894 and 1895 it reached nearly 54,000 tons:—

Year.	Estimated Quantity of Tallow.		
	Produced.	Locally consumed.	Exported.
	tons.	tons.	tons.
1898	23,305	6,713	16,592
1899	19,492	7,139	12,353
1900	22,221	6,768	15,453
1901	22,536	6,206	16,330
1902	12,559	4,884	7,675
1903	11,760	5,710	6,050
1904	17,654	5,897	11,757
1905	24,758	5,681	19,077
1906	24,396	5,838	18,558
1907	24,527	5,788	18,739

For many years the exports of skins and hides have reached a large value, while recently there has been a considerable export of rabbit and hare skins. The following table shows the value of skins exported during the last eight years:—

Year.	Value of Skins and Hides exported.					
	Cattle.	Horse.	Sheep.	Rabbit and Hare.	Other.	Total.
	£	£	£	£	£	£
1900	90,861	248	146,540	4,182	118,882	360,713
1901	153,953	170	202,407	13,291	199,954	574,775
1902	108,152	2,854	344,399	38,094	330,597	824,096
1903	85,332	2,200	242,307	38,233	193,524	561,596
1904	113,977	* .....	160,425	105,952	82,224	462,578
1905	187,517	1,391	361,212	162,783	133,006	845,909
1906	171,868	428	405,340	316,929	144,562	1,039,127
1907	203,081	1,932	534,332	241,099	164,448	1,144,892

\* Included with cattle skins.

The other products of the pastoral industry are of minor importance, as leather is classified as a product of the manufacturing industry. The values of the exports of minor products for the last eight years were as follow:—

Year.	Value of Exports.				
	Hoofs, Horns, and Bones.	Hair.	Edible Fat—Lard.	Glue Pieces—Sinews.	Furs.
	£	£	£	£	£
1900	20,128	8,155	630	10,346	2,465
1901	14,947	11,420	1,049	6,047	1,441
1902	12,713	8,226	657	5,054	909
1903	10,567	7,387	2,601	7,424	917
1904	14,856	9,655	4,340	6,538	1,979
1905	15,559	12,102	4,509	5,484	3,645
1906	15,374	15,543	4,489	8,119	4,637
1907	13,174	11,325	3,923	10,510	1,757

#### NOXIOUS ANIMALS.

The only large carnivorous animal in Australia at all dangerous to stock is the dingo, or native dog; but animals which consume the pasturage, such as kangaroos, wallabies, hares, and rabbits, are deemed by the settlers equally noxious. The rabbits are the greatest pests; at one period over 100,000,000 acres were infested with them, and 25,280,000 were destroyed in one year, and their skins paid for by the Government.

Rabbits first found their way into this State from Victoria, where some were liberated about fifty years ago in the Geelong district. Their presence first attracted serious attention in 1881, when complaints were heard in the south-west of this country of the damage done. They multiplied so rapidly that, in 1882, they were to be met on most of the holdings having frontages to the Murray. Attempts made to cope with them under the Pastures and Stock Protection Act were ineffectual, and the "Rabbit Nuisance Act" was passed. This Act provided for the compulsory destruction of rabbits by the occupants of the land, who were to receive a subsidy from a fund raised by an annual tax upon stockowners, but the fund soon proved inadequate, and from the 1st May, 1883, to the 30th June,

1890, when the Act was repealed, it was supplemented by £503,786 from the Consolidated Revenue. The tax upon stockowners yielded £831,457, and landowners and occupiers are estimated to have contributed £207,864, so that the total cost during the whole period exceeded £1,543,000.

The Rabbit Act of 1890 repealed the 1883 Act and those provisions of the Pastures and Stock Protection Act relating to rabbits. It also provided for the proclamation from time to time of Land Districts as "infested," and for the construction of rabbit-proof fences. From the 1st July, 1890, to the 30th April, 1902, the State expenditure under this Act was £41,620, nearly all of which has been devoted to the erection of rabbit-proof netting. From May, 1902, to December, 1903, the expenditure was £10,548, but the subsequent disbursements have consisted mainly of payments to the Railway Commissioners for the maintenance of rabbit-proof barrier fences, amounting to £5,900 to the end of June, 1908.

In order to prevent the spread of the pest, and also with a view of assisting in its destruction, fences have been erected by the Government of the State at numerous places. The longest of these traverses the western side of the railway line from Bourke, *via* Blayney and Murrumburrah, to Corowa, in the extreme south of the State, a distance of 612 miles, the Railway Commissioners undertaking the work of supervision. On the border between New South Wales and South Australia, there is a fence which extends from the Murray northwards, a distance of about 350 miles. On the Queensland border a rabbit-proof fence has been erected between Barrington and the river Darling, at Bourke, a distance of 84 miles; while another has been erected at the joint expense of the Governments of Queensland and New South Wales, from Mungindi to the Namoi River, a distance of about 115 miles. The total length of rabbit-proof fences erected by the State up to 31st December, 1907, was, approximately, 1,332 miles, at a cost of £69,888; by private persons, 60,941 miles, at a cost of £3,364,196; and by Pastures Boards, 41½ miles, at a cost of £1,825.

The chief means adopted for the destruction of the pest are poisoning and trapping; but it has long been recognised that these methods are inadequate to cope with the evil. In 1906, Dr. Danyasz, an eminent French scientist, claimed to have discovered a disease which was fatal to rabbits and easily propagated amongst them, while proving harmless to other animals or to birds. A liberal offer was made by the pastoralists of the State for the introduction of the disease, and the consent of the Federal Government having been obtained, the doctor was granted the use of Broughton Island by the New South Wales Government for the purpose of conducting experiments with various animals and birds, under the supervision of a medical officer of the Health Department. The experiments were continued during 1907, and in November of that year the Supervising Medical Officer reported that although the microbe used could be made to infect certain small animals, there was no reason to apprehend danger from its practical use, but the efficacy of the virus as a destroyer of rabbits had not been demonstrated.

Although the rabbit has a commercial value both as a food and for the sake of its skin, the return furnished is but a poor compensation for its enormous inroads upon pastures.

Under the provisions of the Pastures Protection Act of 1902, power is given to the Pastures Protection Boards to erect rabbit-proof fences on any land, to take measures to ensure the destruction within their districts of all noxious animals, and to pay as rewards for such destruction, by way of bonus, such sums as may be fixed by the Board from time to time.

## WATER CONSERVATION AND PUBLIC WATERING PLACES.

The necessity of providing a constant water supply for domestic use and also for stock in the dry portions of the interior of the State induced the Government to devote certain funds to the purpose of sinking for water, and bringing to the surface such supplies as might be obtained from the underground sources which exist in the tertiary drifts and the cretaceous beds which extend under an immense portion of the area of New South Wales.

The probability of the existence of underground water had long been a subject of earnest discussion, but doubts were set at rest in 1879 by the discovery on the Kallara run, at a depth of 140 feet, of an artesian supply of water, which, when tapped, rose 26 feet above the surface. The Government then undertook the work of searching for water, and since the year 1884 the sinking of artesian wells has proceeded in a scientific and systematic manner, under the direction of specially-trained officers.

The deepest bore completed is that at Dolgelly, on the road from Moree to Boggabilla, where boring has been carried to a depth of 4,086 feet; this well yields a supply of approximately 622,000 gallons per diem. The largest measured flow obtained from Government bores is from the Boomi, near Moree; the depth of this well is 4,008 feet, and the flow 1,259,975 gallons per diem. The State flowing bores yield over 68,018,000 gallons of water per day, and in addition there are pumping bores which yield 459,000 gallons per day; but in many cases the flow is estimated only, and in others no data are available.

Watering places are established on all the main stock routes of the State, and consist of tanks, dams, wells, and artesian bores. At the close of 1907 there were 393 tanks and dams or reservoirs, 84 wells, and 69 artesian bores. Except at those dams and reservoirs which are of large extent and capacity, stock are not allowed direct access to the tanks, but are watered at troughs which are filled by means of service reservoirs, into which the supply is raised by various methods—steam, horse, or wind power. From the wells the water is mostly drawn by whims and self-acting buckets.

The "Artesian Wells Act of 1897" provides that any occupier of land, or any group of occupiers, may petition the Minister to construct an artesian well, and the necessary distributing channels. The petitioners are required to transfer to the Crown an area, not exceeding 40 acres, embracing the site for the bore, and to pay such charges as may be assessed by the Land Board, which shall not exceed the yearly value to each occupier of the direct benefit accruing to his land from the construction of the bore and the supply of water from the same; but such charges cannot exceed 6 per cent. per annum on the cost of the works. Provision is also made for the Minister to take the initiatory steps when a group of settlers are not in agreement. It is enacted that a two-thirds majority, occupying two-thirds of the area affected, shall rule, and that the minority must come into the scheme and pay proportionately with the others.

Much has been done in the way of artesian boring by private enterprise. As far as can be ascertained, 258 private bores have been undertaken in New South Wales, of which 21 were failures, and 4 are in progress. Information concerning the daily flow is not available, as in many cases this has not been gauged at all, whilst in the others the measurements cannot be regarded as reliable.

The "Water and Drainage Act of 1902" authorises the expenditure of £200,000 annually for a period of five years on works of water supply, water conservation, irrigation, or drainage, and provides for the constitution of trusts in certain cases to administer the same. The majority of the trusts are situated in the northern portions of the State, and have been formed to deal with works that have been wholly or partially constructed under the Artesian Wells Act. The trustees make an assessment to cover maintenance, 4 per cent. interest and 2 per cent. sinking fund, to liquidate the capital cost of the work at the end of twenty-eight years. Under this Act five drainage proposals have been gazetted, while action has been taken to form trusts and gazette proposals in connection with twenty-two bores, which will ensure a return on the capital outlay, and stop the waste of water, which has resulted for some years, from the absence of distributing works.

## DAIRYING INDUSTRY.

### DAIRY FARMING.

THE dairying industry of New South Wales has made considerable advance during recent years, and is now a most important factor in the wealth and prosperity of the State. At an early period in the history of New South Wales dairying was carried on, the first dairy farm for the manufacture of butter being established on the Nepean River. Coming down to a more recent period, dairying as a profitable pursuit was pursued mainly on the South Coast, in the Shoalhaven and Illawarra districts. For many years its progress was slow, and it was not until the introduction of the creamery and factory system that any great development occurred. With the manufacture of butter by machinery and the perfection of the cold-storage system, the real business of dairying may be said to have begun. The first creamery and factory were established in the South Coast district, and for some years dairying was still practically confined to this district; but eventually it was firmly established in the North Coast, especially on the Clarence and Richmond Rivers, where the real home of the industry may now be found. It is on these rivers, and to a less extent on the Tweed, Macleay, Manning, Bellinger, Hastings, and the Lower Hunter, that the greatest expansion has taken place, the advantages of the north having led to the migration of many settlers from the southern districts. A glance at the following figures will show the great strides made by the North Coast district, and how rapidly it has outstripped the south in regard to production.

Year.	Dairy Cows in Milk at end of year.	Total yield of Milk.	Butter made.	Cheese made.	Bacon and Hams cured.
North Coast.					
	No.	gallons.	lb.	lb.	lb.
1897	120,855	.....	9,822,059	62,288	1,087,333
1907	265,203	104,655,617	40,167,867	89,719	3,587,913
South Coast.					
1897	137,643	.....	15,008,881	3,630,633	4,044,063
1907	106,353	43,182,536	10,418,542	3,978,000	4,102,449

In this table the North Coast includes the North Coast, Hunter, and Manning districts, while the South Coast includes the county of Cumberland. It will be seen that with the exception of cheese-making and bacon the north is far in advance of the south. With regard to the figures relating to butter, it should be borne in mind that a large proportion of the milk from the South Coast furnishes the supply of the metropolis. The quantity of milk for each purpose in the two districts during 1907 was:—

		North Coast.	South Coast.
Used on farms for making—		gallons.	gallons.
Butter	...	2,443,321	2,089,681
Cheese	...	11,403	1,818,942
Separated, or sent to creamery or factory	...	96,860,759	29,486,378
Balance sold for other purposes	...	5,340,134	9,787,535
		104,655,617	43,182,536

The quantity of milk used for making butter on farms was 2,443,321 and 2,089,681 gallons, respectively, in each district, while 96,860,759 and 29,486,378 gallons were either separated or sent to the creamery or factory. Of the latter portion 201,024 and 2,720,618 gallons respectively were used for cheese, sweet cream, and condensed milk, leaving 99,103,056 and 28,855,441 gallons used for making butter. Comparing these figures with the production of butter, it is found that, during 1907, 100 gallons in the north yielded 40.78 lb. of butter, and in the south 36.11; so that it would appear that the milk in the northern district contained a higher proportion of butter-fat.

Although dairying is mainly confined to the coastal regions, where grass is available for food throughout the year, it is also actively pursued in the more favoured parts of the non-coastal regions for the purpose of supplying local wants, and already in places remote from the metropolis well-equipped factories have been established. In these localities the industry is generally carried on in conjunction with wheat-farming and sheep-raising, and sufficient fodder must be grown to carry the cattle through the winter months.

Most of the native grasses of the State are particularly suitable for dairy cattle, as they possess milk-producing as well as fattening qualities, and these are supplemented in winter by fodder, such as maize, barley, oats, rye, lucerne, and the brown variety of sorghum or planter's friend. Ensilage is also used as food, but not so generally as it should be, and the quantity made varies considerably in each year. In the year 1903, 21,393 tons were made; in 1904, 12,609 tons; in 1905, only 9,321 tons; in 1906, 11,849 tons; and in 1907, 12,856 tons. The area of land devoted to sown grasses has been largely extended during the last few years, and in March, 1907, it amounted to about 736,000 acres. The produce of this land is principally used as food for dairy cattle, and as the area is still below the present requirements, an extension for this form of cultivation may be anticipated. The number of dairy cows in milk, and the area under sown grasses in each district of the State during 1907 were as follows:—

District.	Area under Sown Grasses.	Dairy Cows in milk.
	acres.	No.
Coastal Division—		
North Coast ... ..	457,596	166,392
Hunter and Manning ... ..	49,744	98,811
County of Cumberland ... ..	1,568	18,165
South Coast ... ..	167,383	88,188
Total ... ..	676,291	371,556
Tableland Division—		
Northern Tableland ... ..	10,756	23,366
Central „ ... ..	11,462	25,575
Southern „ ... ..	4,441	18,481
Total ... ..	26,659	67,422
Western Slopes—		
North-western Slope ... ..	5,170	14,100
Central-western „ ... ..	980	9,609
South-western „ ... ..	4,541	22,190
Total ... ..	10,691	45,899
Western Plains and Riverina—		
North-western Plain ... ..	.....	2,692
Central-western „ ... ..	3,505	4,154
Riverina ... ..	18,877	12,174
Total ... ..	22,382	19,020
Western Division ... ..	57	2,498
Total, All Districts ... ..	736,080	506,395

The number of dairy cows shows a considerable increase during the past eight years, although several of the seasons were most unfavourable. This will be apparent from a consideration of the following figures:—

Year.	No. of Dairy Cows in milk.	Year.	No. of Dairy Cows in milk.
1899 ...	399,327	1904 ...	424,936
1900 ...	420,148	1905 ...	442,950
1901 ...	417,835	1906 ...	494,820
1902 ...	351,287	1907 ...	506,395
1903 ...	362,429		

Since 1902 there has been a remarkable increase in the number of cows, and, still more important, there has been also an increase in their average yield of milk, as shown below:—

Year.	Dairy Cows in milk at end of year.	Production of milk.	Average Yield per Cow.
	No.	gallons.	gallons.
1901	417,835	122,750,500	294
1902	351,287	105,742,900	301
1903	362,429	129,966,100	359
1904	424,936	158,650,800	373
1905	442,950	162,918,600	368
1906	494,820	185,941,230	376
1907	506,395	183,303,474	362

It would have been more scientific to have based the average yield on the mean number of cows in milk during the year. Owing, however, to the great difficulty in ascertaining that number, which depends not only on the actual number of cows, but the length of time during which they were in milk, the average has been deduced as above, and probably is as accurate as can be obtained. Allowing for these contingencies, it is evident that there has been a substantial increase in the average yield since the first year quoted. The figures for 1907 are not so high as in the previous three years, as the season was not favourable in many parts of the State.

Almost as important as the average yield of milk is the percentage of butter-fat contained therein, and it is satisfactory to note that this also shows an improvement since 1902, the first year for which the proportion can be ascertained. In order to show the improvement in this respect, the following table has been prepared, showing the quantity of butter made and the milk used for that purpose during each of the last six years, and distinguishing between the milk treated on farms and in factories:—

Year.	On Farms.		In Factories.		Total.	
	Milk used.	Butter made.	Milk used.	Butter made.	Milk used.	Butter made.
	gallons.	lb.	gallons.	lb.	gallons.	lb.
1902	9,914,454	3,417,502	66,924,976	26,533,475	76,839,430	29,950,977
1903	11,859,529	4,094,150	87,189,710	34,632,957	99,049,239	38,727,107
1904	12,791,709	4,530,771	117,698,450	49,060,472	130,490,159	53,591,243
1905	13,640,534	4,576,076	116,723,795	48,464,174	130,364,330	53,040,250
1906	14,288,379	4,636,642	141,760,969	54,304,495	156,049,348	58,941,137
1907	12,750,602	4,128,256	140,357,812	55,913,193	153,108,414	60,041,449

Comparing the quantity of milk used with the butter produced during the past two years, it is found that although the proportion of butter-fat increased during 1907, owing to the dryness of the season, nevertheless 100 gallons of milk yielded 1·9 lb. of butter less than in 1904:—

Year.	Quantity of butter per 100 gallons of milk treated.		
	On Farms.	In Factories.	On Farms and in Factories.
	lb.	lb.	lb.
1902	34·5	39·6	39·0
1903	34·5	39·7	39·1
1904	35·4	41·7	41·1
1905	34·0	41·5	40·7
1906	32·0	38·0	37·8
1907	32·4	39·8	39·2

As already stated, it was the manufacture of butter by machinery which made the dairying industry really important, and it is to the introduction of the factory system in convenient centres that it owes its present development. When the factory system was introduced, the process of cream separation and butter making were carried on together. This arrangement was improved by the establishment of public "creameries" or separating stations, where the cream is separated and then sent to the factories. In the last few years there has been another great change, and most of the farmers now treat the milk in their own dairies by means of hand separators. The subjoined table shows to what extent this system has been adopted since 1902, the first year for which the information is available:—

Year.	Milk Separated for making Butter.			
	On Farms.		In Public Separating Stations.	Total.
	By hand, &c.	By steam, &c.		
	gallons.	gallons.	gallons.	gallons.
1902	54,124,023	6,319,687	16,395,720	76,839,430
1903	76,419,864	5,771,980	16,857,395	99,049,239
1904	108,029,663	6,184,480	16,276,016	130,490,159
1905	103,438,591	7,577,972	19,347,767	130,364,330
1906	140,859,572	5,899,445	9,290,331	156,049,348
1907	142,843,911	3,775,899	6,488,604	153,108,414

Most of the factories dealing with dairy produce are established on the co-operative principle, and during the past eleven years the total value of the machinery has increased from £224,526 to £278,380. During this period the quantity of butter made has increased from 29,409,966 lb. to 60,041,449 lb. The production in each district during 1907 is shown in the following table:—

District.	Butter made.	District.	Butter made.
	lb.		lb.
Coastal Division—		Western Slopes Division—	
North Coast ...	26,846,383	North-western Slope ...	949,295
Hunter and Manning ...	13,321,484	Central-western " ...	767,152
County of Cumberland... ..	768,094	South-western " ...	1,954,921
South Coast ...	9,650,448	Total ...	3,671,368
Total ...	50,586,409	Western Plains & Riverina—	
		North-western Plains...	30,205
Tableland Division—		Central-western " ...	108,658
Northern Tableland ...	1,660,668	Riverina ..	621,266
Central " ...	2,126,082	Total ...	760,129
Southern " ...	1,199,938	Western Division ...	36,855
Total ...	4,986,688	Total, All Districts ...	60,041,449

Prior to 1890 the State was under the necessity of importing a considerable quantity of butter to meet local requirements, but from that year an export trade was commenced, the surplus increasing from 281,341 lb. in 1890 to 22,250,668 lb. in 1906. The following table shows the comparative figures of production:—

Year.	Butter made—			Excess of Exports over Imports.	Apparent local consumption of Butter.
	In Factories.	On Farms.	Total.		
	lb.	lb.	lb.	lb.	lb.
1898	26,522,467	4,961,134	31,483,601	7,759,421	23,724,180
1899	28,817,747	4,216,134	33,033,881	4,549,722	28,484,159
1900	37,056,317	4,423,477	41,479,794	8,487,534	32,992,260
1901	34,282,214	4,774,664	39,056,878	8,643,071	30,413,807
1902	26,533,475	3,417,502	29,950,977	*1,779,583	31,730,560
1903	34,632,957	4,094,150	38,727,107	7,625,069	31,102,038
1904	49,060,472	4,530,771	53,591,243	20,513,307	33,077,936
1905	48,464,174	4,576,076	53,040,250	13,841,514	39,198,736
1906	54,304,495	4,636,642	58,941,137	22,250,668	36,690,469
1907.	55,913,193	4,128,256	60,041,449	18,923,638	41,117,811

\* Excess of Imports.

The proportion of factory-made butter in the total production has increased from 84 to 93 per cent. during this period; and this is not surprising, for not only is less milk required to produce a certain quantity of butter, but the price is also from  $\frac{1}{2}$ d. to 1d. per lb. higher than for butter made on farms.

The export trade has grown rapidly, and is carried on almost entirely with the United Kingdom, whose immense population presents an enormous market for all products of the dairying industry. The imports of butter into the United Kingdom during the last five years are shown hereunder:—

Year.	Imports of Butter from New South Wales.	Proportion of English Imported Butter.
	cwt.	per cent.
1903	20,371	·50
1904	159,622	3·76
1905	168,531	4·06
1906	180,655	4·17
1907	195,289	4·64

It is only during the last sixteen years that Australasian butter has attracted notice on the London market, for although small consignments had been sent previously to London, the huge import into that city from Denmark and Sweden practically controlled the price of the Australian article. The position is now, however, changed, for in 1907 more than 22 per cent. of all the butter imported into London during the winter months was of Australasian origin, and on many occasions Australasian creamery butter has commanded a higher value than Danish. The prices per cwt. for New

South Wales butter in London during the last four seasons were as shown below :—

Month during which Sales were effected in London.	1904-1905.		1905-1906.		1906-1907.		1907-1908.	
	Top.	Bottom.	Top.	Bottom.	Top.	Bottom.	Top.	Bottom.
	1904.		1905.		1906.		1907.	
August ...	s. ...	s. ...	s. ...	s. ...	s. ...	s. ...	s. ...	s. ...
September ...	97	86	110	104	114	111	98	96
October ...	97	90	114	106	119	113	119	112
November ...	102	91	113	108	117	111	119	112
December ...	104	92	115	110	109	106	120	114
	1905.		1906.		1907.		1908.	
January ...	102	94	116	108	104	96	122	115
February ...	102	96	106	101	101	96	136	126
March ...	105	100	104	94	100	97	117	109
April ...	103	95	95	90	98	91	111	105
May ...	94	87	97	95	97	90	110	103
June ...	95	87	97	94	96	91	106	97
July ...	100	96	103	94	97	93	109	104

The experience of the export trade shows that butter should be made expressly for this purpose, and should be salted and coloured to suit the taste of the particular market for which it is intended. So long as the present standard is maintained, there appears little doubt that the product of the State will continue in its present demand. There is no reason, however, why further improvement should not be made, and this can be effected by greater attention to detail.

In earlier years the difficulty in securing ocean freights during the export season constituted a severe drawback, but now that the trade has assumed such important dimensions it is the subject of keen competition among shipping companies, and there is no lack of facilities in this respect, while the charges have been greatly reduced.

The freight on butter forwarded by mail steamers from Sydney to London during the seasons 1900-1 to 1904-5, was 3s. 6d. per box of 56 lb., while other steamers accepted shipments at rates varying from 1½ d. to 3d. per lb. For the season 1905-6 mail steamers contracted to accept 1s. 10d. per box, while other steamers charged 3d. per lb., or 1s. 9d. per box, but during 1907 the rates were raised 2s. per box.

Although the manufacture of butter has increased so rapidly, there has not been a similar increase in the quantity of cheese made, which in 1907 was only 14 per cent. more than in 1896, while the production of butter had increased by 132 per cent. It is true that the demand for cheese is much more limited, but as the production does not at present meet the requirements of the local market, it is evident that the manufacture of butter has been found to be more profitable. It is certain that the manufacture of cheese will never command the same attention as butter, owing to its great disadvantages as an article of export. Cheese matures quickly, and, unlike butter, cannot be frozen; and it decreases in value unless sold just at the right time. Moreover, it has only half the money value of butter, while the cost of freight is practically the same; so that it is not surprising that even where cheese can be produced in New South Wales under excellent conditions its manufacture is not being greatly extended.

The following table shows the manufacture of cheese in districts during 1907:—

District.	Cheese.
Coastal Division—	lb.
North Coast ... ..	77,487
Hunter and Manning ... ..	12,232
County of Cumberland ... ..	7,288
South Coast ... ..	3,970,712
Total ... ..	4,067,719
Tableland Division—	
Northern Tableland ... ..	153,211
Central „ ... ..	71,526
Southern „ ... ..	22,381
Total ... ..	247,118
Western Slopes Division—	
North-western Slope ... ..	28,584
Central-western „ ... ..	13,063
South-western „ ... ..	229,573
Total ... ..	271,220
Western Plains and Riverina Division ... ..	800
Western Division ... ..	.....
Total, All Districts ... ..	4,586,857

It will be seen that cheese-making is practically confined to the South Coast; in fact, the quantity made in other parts of the State is becoming smaller each year.

While fully recognising that the manufacture of cheese for export has many disadvantages as compared with butter, it is evident that these apply in a greater or less degree to other countries, and it is, therefore, somewhat surprising to find there is still a large import into this State.

The following table shows, for each year of the last decennial period, the local production and the total consumption of cheese:—

Year.	Production of Cheese.			Excess of Imports over Exports.	Apparent local consumption of Cheese.
	In Factories.	On Farms.	Total.		
	lb.	lb.	lb.	lb.	lb.
1898	2,220,445	1,024,867	3,245,312	1,670,525	4,915,837
1899	1,376,395	1,009,092	2,385,987	2,454,260	4,840,247
1900	2,322,663	1,236,160	3,558,823	1,503,526	5,062,349
1901	2,428,599	1,410,236	3,838,835	1,771,247	5,610,082
1902	2,691,439	1,456,599	4,148,038	873,627	5,021,665
1903	3,340,510	1,407,666	4,748,176	811,745	5,559,921
1904	2,677,830	1,545,791	4,223,621	496,595	4,720,216
1905	2,997,982	1,627,998	4,625,980	414,972	5,040,952
1906	3,459,641	1,929,704	5,389,345	77,700	5,311,645
1907	3,261,894	1,324,963	4,586,857	540,041	5,126,898

\* Excess of Exports.

In addition to butter and cheese there are other milk products which might receive more attention than they command at present. The manufacture of condensed milk is a matter which comes under this heading, for the annual import during the last eight years has averaged 5,078,000 lb., with a value of £91,400. At present there are three factories in the State, situated at Bomaderry, Belford, and Pitt Town. A somewhat similar product, known as concentrated milk, is also being manufactured at the Bomaderry and Belford factories. This article will keep for months in cool chambers, and is principally used on ocean-going steamers. Being without sugar, it has all the richness and flavour of fresh milk, and in this respect is more useful than condensed milk, which is not palatable to many people. The total quantity of milk used in the manufacture of the two products in 1907 was 388,119 gallons, and the output of the articles aggregated 1,526,471 lb.

#### SWINE.

The breeding of swine, which is usually carried on in conjunction with dairy-farming, has been very much neglected in New South Wales, for although the number at the end of 1904 was the highest yet reached, it does not show any great increase on that of 1880, as the following figures prove:—

Year.	Swine.	Year.	Swine.	Year.	Swine.
	No.		No.		No.
1860	180,662	1892	249,522	1900	256,577
1865	146,901	1893	240,860	1901	265,730
1870	243,066	1894	273,359	1902	193,097
1875	199,950	1895	223,597	1903	221,592
1880	308,205	1896	214,581	1904	330,666
1885	208,697	1897	207,738	1905	310,702
1890	283,061	1898	247,061	1906	243,370
1891	253,189	1899	239,973	1907	216,145

Considering the importance which the industry has attained in other countries, it is a matter for surprise that more attention has not been paid to it in this State, where the conditions of farming in many parts, and more especially in the coast districts, offer great facilities for the raising of this class of stock.

The breeding of swine is an important factor in successful dairy-farming, but the number of stock has not kept pace with the increase in the quantity of milk available for food. A farmer who possesses his own cream separator can utilise the separated milk for the purpose of feeding pigs, and those who sell their milk to a creamery may sometimes obtain separated milk without cost, and in any case it can be purchased at about a farthing per gallon, a price which renders it a most profitable food for pigs, provided that such crops as maize, rye, peas, mangolds, pumpkins, &c., are grown to supplement the milk diet. Under these circumstances, and as it is no uncommon thing for good bacon pigs to bring over £3 in the open market, the breeding of a good class must be a profitable pursuit. Until recent years there was some difficulty in obtaining suitable pigs for breeding purposes, but as stock from the best imported strains may now be purchased at the Government Experiment Farms and other Institutions, this difficulty has been overcome. The breeds generally met in the State are the improved Berkshire, Poland, China, and Yorkshire strains.

The following statement shows the number of pigs in each district at the end of 1907, and the quantity of bacon and ham made:—

District.	Swine.	Bacon and Ham made.
	No.	lb.
Coastal Division—		
North Coast ... ..	51,421	2,851,951
Hunter and Manning ... ..	42,211	735,962
County of Cumberland ... ..	13,062	3,299,240
South Coast ... ..	24,914	803,209
Total ... ..	131,608	7,690,362
Tableland Division—		
Northern Tableland ... ..	10,232	366,063
Central „ ... ..	14,788	642,396
Southern „ ... ..	8,274	367,077
Total ... ..	33,294	1,375,536
Western Slopes Division—		
North-western Slope ... ..	10,159	127,813
Central-western „ ... ..	6,902	215,249
South-western „ ... ..	13,155	406,501
Total ... ..	30,216	749,563
Western Plains and Riverina Division—		
North-western Plains... ..	2,175	14,492
Central-western „ ... ..	4,334	142,557
Riverina ... ..	9,988	352,955
Total ... ..	16,497	510,004
Western Division ... ..	4,530	33,061
Total, All Districts ... ..	216,145	10,358,526

There is no reason why the production of bacon and hams should not be very largely increased, as, except in very rare instances, it has not been sufficient to meet local requirements.

The production has varied with the seasons, but the general tendency is towards an increase, as may be seen from the following table:—

Year	Production and Consumption of Bacon and Hams.				
	Factory.	Farm.	Total Production.	Excess of Imports over Exports.	Apparent Consumption.
	lb.	lb.	lb.	lb.	lb.
1898	4,836,899	2,347,159	7,184,058	*220,536	6,963,522
1899	4,452,112	2,379,831	6,831,943	291,145	7,123,088
1900	7,963,670	2,899,455	10,863,125	1,030,889	11,894,014
1901	7,392,060	3,688,831	11,080,891	1,188,843	12,269,734
1902	6,143,030	2,852,826	8,995,856	1,719,451	10,715,307
1903	5,664,492	2,200,279	7,864,771	820,006	8,684,777
1904	7,343,220	3,337,312	10,680,532	919,974	11,600,506
1905	6,931,217	4,721,223	11,652,440	2,692,758	14,345,198
1906	7,337,910	4,505,685	11,843,595	2,258,631	14,102,226
1907	7,240,685	3,117,841	10,358,526	2,609,030	12,967,556

\* Excess of Exports.

As with butter and cheese, the production of bacon and ham is principally confined to the coast districts, but the breeding of pigs is more evenly distributed throughout the State.

At present there are few factories devoted entirely to the curing of bacon and hams, and more bacon factories fitted with refrigerating machinery are required, so that curing may be continued during the summer months. In these central establishments, moreover, greater care could be exercised both in securing uniformity in the quality of the article and in cutting. For export the animals should be grown larger, as English bacon pigs weigh 300 or 400 lb. each. The pigs bred in this State are usually sold when fat as porkers at from 60 lb. to 90 lb. weight, the majority being sent to the Sydney market alive. The price ruling for good porkers during 1907 ranged from 29s. 6d. to 40s. 9d., the average being about 33s. 9d. Owing to the neglect to grow root crops for the purpose of feeding pigs during the winter, when milk is scarce, the demand for store pigs at the commencement of the summer is usually very great, while there is a corresponding glut of fat pigs at low prices as winter approaches.

The number of swine slaughtered during 1907 was 238,488, of which 112,294 were killed in the metropolis.

#### VALUE OF PRODUCTION.

The value of the production from the dairying industry during 1907 was £3,340,000, to which may be added £227,000 obtained from the sale of swine, making a total of £3,567,000. The value from each product was as follows:—

	£
Butter ... ..	2,503,000
Cheese ... ..	117,000
Milk (not used for butter or cheese) ... ..	418,000
Milch Cows ... ..	302,000
Swine ... ..	227,000
	<hr/>
	£3,567,000

There has been a considerable increase in the total value of dairy production during the past few years, the figures for 1906 being £3,425,000, as compared with £3,123,000 in 1905 and £2,753,000 in 1904.

### OTHER PRIMARY INDUSTRIES.

#### POULTRY-FARMING.

Poultry-farming, as an adjunct to the dairying industry, has been carried on for many years, but it is only within a comparatively recent period that it has developed into a distinct and flourishing industry on its own footing. In the neighbourhood of the metropolis, as well as in other portions of the State, may now be found large poultry-farms, laid out in the most approved style, and fitted with the latest inventions for the hatching and fostering of young stock. The greatest attention is paid to the breeding of the birds, both with regard to their egg-producing capacity, and also to their value for table purposes. As complete information as to the number of poultry is not available, it is impossible to give more than a general estimate of the production, the value in 1907 being computed at £1,035,000.

## BEE-KEEPING.

Although there are but few persons in the State who devote their time solely to the bee-keeping industry, the number of hives and the annual production are gradually increasing. The production of honey and beeswax shows great variation during the past ten years, as will be apparent from the following table:—

Year ended 31st March—	Bee Hives.		Honey.	Average Yield of Honey per Hive.	Beeswax.
	Productive.	Un-productive.			
	No.	No.	lb.	lb.	lb.
1899	51,681	7,604	2,974,830	57·6	52,904
1900	48,997	9,813	2,795,141	57·0	55,988
1901	47,394	11,560	2,397,698	50·6	49,337
1902	42,174	10,915	2,259,177	53·6	51,735
1903	37,980	8,263	1,815,480	47·8	37,207
1904	45,094	13,236	2,147,295	47·6	49,589
1905	53,043	11,687	3,023,468	57·0	58,610
1906	36,589	12,043	1,841,236	50·3	39,620
1907	37,306	11,964	1,907,744	51·1	34,690
1908	53,240	15,148	2,660,363	50·0	48,427

The production for each division during 1907 was as follows:—

Division.	Honey.	Beeswax.
	lb.	lb.
Coastal Division...	977,763	19,993
Tableland Division ...	865,134	15,237
Western Slopes Division...	654,982	11,180
Western Plains and Riverina Division.	156,194	1,870
Western Division ...	6,290	147
Total	2,660,363	48,427

There is still a considerable quantity of honey imported into the State, the average annual import being about 200,000 lb. The estimated value of the production of honey and beeswax in 1907 was £30,000.

## FORESTRY.

Few countries contain timbers exceeding in variety and quality those originally existing in New South Wales. They range from the ironbarks, unsurpassed for work requiring hardness and durability, to the kinds suitable for the most delicate specimens of the cabinetmaker's art. It must be confessed, however, that some varieties of timber trees, at one time very plentiful, and which had they received attention at the hands of the State, would be plentiful still, are now hard to find in any district to which there is easy access.

The advance of settlement and neglect to conserve the forests have considerably reduced the timber-producing areas of the State. But this is the common experience of new countries, where the pioneers, whether settlers or timber-getters, cut down indiscriminately, giving no thought to anything but their immediate requirements.

The necessity of preserving the timber resources of the State has become so serious that the Government recently appointed a Royal Commission to investigate the matter, and, *inter alia*, to report upon the effectiveness of the present forestry laws, and to indicate what steps should be taken in the

direction of afforestation and re-afforestation. At the present time only about 15,000,000 acres are covered by timber of commercial value, and of this area, 7,155,902 acres, or less than half, have been reserved for the preservation and growth of timber.

It has been estimated that at the present rate of consumption the supplies of hard and soft timbers will last for 47 and 28 years respectively, the young timber which will mature in the meantime being taken into consideration.

The Royal Commission has recommended the framing and passing of a Forestry Act, to be administered by three Commissioners, with the assistance of the necessary officers, the present field staff being strengthened considerably. An area of 7,610,056 acres should be dedicated permanently for the preservation, growth, and re-growth of timber, and owing to the enhanced prices of timber, the State should benefit to a greater extent by increased royalties. It is also recommended that the oversea export of ironbark and tallow-wood be prohibited for a period of ten years. It is hoped by these means that the ruthless destruction of the best species of brush and hardwood which has been carried on, principally in the Clarence River district and in the eucalyptus forests on the Murray, will be prevented.

It is a most difficult matter to state with any degree of accuracy the annual value of production for this branch of industry, but it has been calculated to represent, at the base of production, about £1,226,000 for 1907, the return from hardwood sleepers obtained for export and local use being about £138,000.

#### FISHERIES.

The seas that wash the shores of New South Wales abound with fish, but this source of wealth to the State has been greatly neglected. Splendid fishing-grounds extend along the whole length of the coast, which presents many natural features peculiarly favourable to the existence of a very large supply of the best food fishes. In the quiet waters of its numerous bays and estuaries, and in the vast lakes and lagoons communicating with the sea, are found shelter and sustenance, as well as excellent breeding-grounds. The principal fishes found on the coast are not migratory, and as a consequence may nearly always be procured in the market. But with an unlimited supply in the sea, the fishing industry has long been in an unsatisfactory condition, and fresh fish is, with few exceptions, scarce and high-priced, while preserved fish to the value of £130,000 is imported annually for local consumption.

At the present time, the control of the fisheries of the State is placed in the hands of a body of Commissioners, who, through their inspectors and other officers, supervise the fishing industry, and see that the regulations which they have issued in regard to the dimensions of nets, the closing of tidal waters to net-fishing, and other matters, are observed. Every fisherman in tidal waters must apply for a license yearly, the fee being 10s., which is reduced to half that amount if the license is issued in the second half of the year. A license must also be taken out for every fishing-boat, the fee being £1, which likewise is reduced by one-half if granted after the 30th June. Penalties are imposed by the Fisheries Acts for breaches of the regulations of the Commissioners.

The number of fishing-boat licenses issued during the year 1907 was 1,025, and the number of licenses granted to fishermen was 1,935, the fees received for these 2,960 licenses amounting to £983. The class of boat used for fishing purposes in New South Wales is poor, and very little improvement

is likely to result to the industry if the present fishermen are left unaided with their primitive appliances, and others of a better class, provided with capital, are not induced to take up the industry.

For the purpose of oyster culture, the Crown grants leases of the foreshores of tidal waters, which may be defined as between the mean high and mean low-water mark. The rental is 20s. per annum for every 100 lineal yards. The maximum length for which a lease may be obtained is 2,000 yards, but as the same person may take out more than one lease, the portion of shore which may be acquired is practically unrestricted by the Oyster Fisheries Act. The lease may be taken out for a term of ten years. Leases of deepwater or natural oyster beds are also granted for an area not exceeding 25 acres, at a rental which must not be less than £2 per acre. During the year 1907, 458 applications for leases, aggregating 144,440 yards, were made; while at the end of the year the existing leases numbered 1,890, and the length of the foreshore held was 553,975 yards. In addition, there were in existence deep-sea leases to the extent of 65 acres 38 perches. The deposits paid with the applications for leases amounted to £972, while the rentals received from leased areas came to £4,424 during the year.

During 1907, 14,406 bags of oysters were obtained from the tidal waters of the State. During 1900, 20,182 bags were taken, but from this year the annual take showed a general tendency to decrease on account of the spread of disease in some of the rivers. The smallest quantity of oysters taken—12,613 bags—was during 1904, but this quantity has been exceeded in each of the subsequent years. During 1907, the output, which amounted to 14,406 bags, was only 351 bags less than the take during 1906.

It is estimated that the annual value of production of the fisheries of this State is about £156,000.

#### RABBITS AND HARES.

The growth of the export trade in frozen rabbits and in rabbit skins is a noticeable development of recent years, but the return thus brought to the State is by no means commensurate with the financial losses caused by the depredations of the pest.

Year.	Value of Domestic Exports.		
	Frozen Rabbits and Hares.	Rabbit and Hare Skins.	Frozen Rabbits, Hares, and Skins.
	£	£	£
1900	4,537	4,182	8,719
1901	6,233	13,291	19,524
1902	12,143	38,094	50,237
1903	37,653	38,233	75,886
1904	56,007	105,952	161,959
1905	145,268	162,783	308,051
1906	248,507	316,929	565,436
1907	303,078	241,099	544,177

The export trade, which is principally with the United Kingdom, amounted to £544,177 in 1907; but these figures by no means represent the total return from rabbits and hares, which may be set down as approximately £643,000 during this year. In the State itself, these animals now form a common article of diet, both in the metropolis and country, especially during the winter months, when large numbers of men are engaged in their capture and distribution. The fur is also largely used in the manufacture of hats.

## MINING INDUSTRY.

VERY few countries, if any, have been endowed by Nature with such a diversity of mineral wealth in proportion to area as New South Wales, and experts maintain that so far only the merest fringe of the mineral deposits has been touched. It is only reasonable therefore to expect that as population increases and additional capital is expended in exploiting the various mineral fields at greater depths than is now possible by the ordinary miner, the mining industry will continue to be an important factor in maintaining and increasing the national wealth of the State.

The number of persons engaged in the search for the precious metal was at one time very considerable, but as the fields were despoiled of the wealth contained in the alluvial deposits lying to the hand of the digger, the mining population has decreased steadily. The depletion of the easily-obtained alluvial deposits and the abandonment of a gold-field were not, of course, always a loss to the country, for after the excitement had died out the digger made way for the agriculturist, and resources of a more permanent character were developed in all parts of the State. Gold-mining now requires the expenditure of capital for the erection of plant and gold-saving machinery, and the individual miner does not find such opportunities for profitable labour as he did in the early days.

Prior to 1851, coal was the only mineral raised, but for the brief period embraced in the wonderful years that immediately succeeded the memorable discovery by Hargraves, gold-mining was the leading industry of the State. Amongst the minerals now obtained, however, gold is of far less importance than silver or coal.

### MINERS EMPLOYED AND PRODUCTION.

The following table gives the approximate number of persons actually engaged in the principal departments of mining during each of the past eight years. The figures are given on the authority of the returns furnished to the Mines Department:—

Mineral.	Miners employed at end of each year.							
	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
	No.	No.	No.	No.	No.	No.	No.	No.
Gold .....	17,958	12,064	10,610	11,247	10,648	10,309	8,816	7,468
Silver and Silver-Lead .....	8,196	6,298	5,382	6,035	7,071	7,887	9,414	10,021
Tin .....	1,413	1,428	1,285	2,502	2,745	2,884	3,795	3,173
Copper .....	3,334	2,964	1,699	1,816	1,850	2,171	3,047	3,764
Coal .....	11,333	12,191	12,815	13,917	14,034	14,019	14,929	17,080
Shale .....	158	224	299	200	112	118	270	276
Other Minerals .....	1,353	1,446	1,602	1,842	1,377	1,544	2,275	1,976
Total .....	43,745	36,615	33,695	37,559	37,837	38,932	42,546	43,758

During a portion of the period covered by the above table there was a marked falling-off in the number of men engaged in mining as compared with the earlier years. The highest point was reached in 1900, when the industry found employment for 43,745 miners; but in the two subsequent years large decreases were recorded, mainly owing to long continued dry weather. From 1903 onwards, however, there has been a steady increase in the miners employed, who at end of 1907 numbered 43,758—practically the same number as in 1900.

With the exception of 1903, the gold-miners have steadily decreased year by year, till at the end of 1907 they numbered only 7,468, or considerably less than half the number so employed only seven years ago. This apparent neglect of gold-mining is, no doubt, due to some extent to the diversity of the mineral wealth of this State; for, during the past few years most of the available capital has been directed towards the development of other minerals, as is indicated by the satisfactory increase in the number of men mining for silver, tin, copper, and coal. The reefs on most of the gold-fields have been worked, as far as practicable, by the ordinary miner, and the introduction of capital is necessary for their further development. Fossicking has not been followed so persistently as in the earlier years. In comparing the detailed returns for 1907 with those of the previous year, it will be found that there were 343 less men employed in quartz-mining and 1,005 in alluvial-mining. This falling-off is attributable to the decrease in the number of small gold-mines and claims worked, and the cessation of active prospecting and fossicking operations during the year.

The value of mining plant and machinery may be set down approximately at £3,802,000, of which £1,171,000 represents the value of the winning, weighing, and ventilating plant and machinery used in connection with coal and shale mines. The value of machinery in operation on other mineral fields is shown below:—

Classification.	Value at 31st December, 1907.
	£
Gold—Dredging ... ..	183,000
Hydraulic Sluicing ... ..	21,000
Other Alluvial ... ..	13,000
Quartz ... ..	560,000
Silver and Lead ... ..	1,238,000
Copper ... ..	231,000
Tin-Dredging ... ..	143,000
Other ... ..	14,000
Other Metals or Minerals ... ..	228,000
	£2,631,000

The value of machinery and plants in operation at the mines is, as stated above, £3,802,000; but it should be explained that this sum does not include the value of the large smelting plants in operation at Cockle Creek, and Woolwich, the copper reducing and refining plants at Lithgow and Newcastle, and the plant at the Eskbank iron-works, the total value of which is estimated at not less than £250,000. The total is exclusive also of value of plant used for conveying products from the mines to railway station or wharf; which, in the case of coal and shale mining, is set down at £973,000.

The summary given below shows the value of the production of the various minerals since their first discovery, as well as of minerals won in the years 1904, 1905, 1906, and 1907 :—

Mineral.	Value.				
	1904.	1905.	1906.	1907.	To end of 1907.
	£	£	£	£	£
Gold (native ores only) ...	1,146,109	1,165,013	1,078,866	1,050,730	55,364,882
Coal ....	1,994,952	2,003,461	2,337,227	2,922,419	53,279,162
Silver and silver-lead ...	2,065,540	2,494,052	2,862,973	3,915,946	46,621,670
Copper, Matte, and Ore ...	406,001	527,403	789,527	727,774	9,200,403
Tin and ore ...	188,377	226,110	255,744	293,305	8,037,814
Kerosene Shale ...	26,771	21,247	28,470	32,055	2,167,500
Zinc (Spelter and Concentrates)	117,978	221,155	292,806	536,620	1,426,894
Coke ...	110,692	100,306	110,607	159,316	1,265,680
Noble Opal ...	57,000	59,000	56,500	79,000	1,068,099
Lead (pig, &c.) ...	65,964	2,657	1,084	374,182	905,217
Limestone flux ...	14,434	9,519	7,463	16,162	633,631
Antimony and ore ...	503	5,221	52,645	46,278	299,557
Bismuth ...	12,329	20,763	5,700	5,268	119,882
Diamonds ...	11,620	3,745	2,120	2,056	106,145
Chrome iron ore ...	1,268	62	15	105	101,108
Alunite ...	925	6,750	4,637	5,115	87,712
Ironstone flux ...	6,628	4,525	723	7,707	69,005
Pig iron ...	.....	.....	.....	60,550	60,550
Wolfram ...	8,432	7,361	9,057	26,235	53,546
Scheelite ...	1,406	10,122	7,647	23,781	47,511
Molybdenite ...	2,726	2,507	4,798	3,564	19,894
Platinum ...	1,070	825	623	1,014	18,554
Iron oxide ...	239	417	336	1,961	16,089
Cobalt ...	60	.....	.....	.....	7,955
Manganese ore ...	.....	.....	.....	.....	1,655
Sundry minerals ...	2,237	4,860	3,148	4,147	124,488
Total Value ...	£ 6,243,261	6,897,081	7,912,716	10,295,290	181,104,603

At the end of 1907 the State had produced various minerals of the total value of more than 181 millions sterling. In connection with the estimate of production, it may be explained that the figures differ slightly from those issued by the Mines Department. Such items as scrap-iron, Portland cement, and lime have been included in the report of the Mines Department; but these have been rejected in preparing the above statement, as these products are considered in connection with the statistical returns of manufactories and works. For the sake of comparison, however, the following table has been prepared, and the value of each of the items mentioned is given for the same periods as shown in the previous summary :—

Article.	Value.				
	1904.	1905.	1906.	1907.	To end of 1907.
	£	£	£	£	£
Iron made from scrap ...	80,504	85,693	112,848	118,082	1,390,583
Portland cement ...	54,750	88,100	128,487	144,548	518,125
Lime ...	13,250	15,019	15,573	19,458	124,449
Totals ...	148,504	188,812	256,908	282,088	2,033,157

**GOLD.**

Amongst the metallic minerals found in the State, gold occupies the foremost place, both on account of the quantity which has been raised and of the influence of its discovery on the settlement of the country.

Native gold is the only true mineral species of the metal which has so far been found in New South Wales, and was first met with in easily-worked alluvial deposits. These diggings, until recent years, attracted a large number of miners, as the gold is obtained without costly appliances; but however rich they may be, alluvial deposits are very soon worked out, their area generally being of limited extent.

Although the alluvial deposits discovered in the early days have been practically abandoned and are considered to be worked out, there is ample evidence that the surface of the country has been merely scratched. The search for gold has been prosecuted for more than half a century, and still new fields and fresh deposits are being discovered—in localities, too, supposed to have been thoroughly examined. The gold formation is very widely diffused throughout the State, as may be gathered from the fact that the fields of Albert, Delegate, and Ballina are between 600 and 700 miles distant from each other; and it has been estimated that the extent of country covered by formations in association with which gold always occurs, exceeds 70,000 square miles, whilst it has also been found in strata where its presence was never suspected. A considerable portion of this area has never been touched by the miner.

Gold is also found in quartz-veins, occurring in older and metamorphic rocks, such as argillaceous slates, chloritic and talcose schists, as well as granite, diorite, serpentine, and porphyry. Vein gold is associated more commonly with iron pyrites, though found with copper, lead, zinc, and silver ores, and also in asbestos. But the extraction of gold from quartz-veins requires extensive machinery and gold-saving appliances, involving an outlay of capital such as the ordinary miner seldom possesses, consequently this branch of mining is generally carried on by companies.

It would be impossible to name every part of the province in which gold is found, as the precious metal appears throughout the greater portion of the territory, and there is ample evidence that there exist deposits which will offer to the prospector or the miner a profitable field of employment for many years to come.

Below will be found the quantity and value of the gold produced during each quinquennial period since 1851, and for each of the years 1906 and 1907. New South Wales gold which was received at the Sydney Mint for coinage in 1907 amounted to 179,489 oz., of the gross value of £637,022, the average price being £3 10s. 10d. per oz.

Period.	Quantity.	Value.
	oz.	£
1851—1855 ... ..	1,920,200	6,338,257
1856—1860 ... ..	1,360,763	5,192,326
1861—1865 ... ..	2,233,001	8,606,290
1866—1870 ... ..	1,309,911	5,069,812
1871—1875 ... ..	1,613,049	6,210,345
1876—1880 ... ..	640,210	2,366,310
1881—1885 ... ..	626,931	2,333,358
1886—1890 ... ..	546,954	1,973,183
1891—1895 ... ..	1,176,325	4,258,462
1896—1900 ... ..	1,691,012	6,073,658
1901—1905 ... ..	1,353,526	4,813,285
1906 ... ..	302,556	1,078,866
1907 ... ..	289,043	1,050,730
	15,063,481	55,364,882

Thus the value of the gold won amounts to over £55,000,000; and although the annual yield is now considerably less than that of either silver or coal, yet gold holds the premier position as regards the total value of production, exceeding that of silver and coal by about £9,000,000 and £2,000,000 respectively.

The figures for 1906 do not reflect accurately the position of the industry, as gold to the value of £160,118 was purchased from the mines within this State; but as it was not lodged at the Mint, it could not be included in the official returns for 1906.

Similarly in 1907 the quantity carried forward was valued at £132,237, so that the yield for this year has been supplemented by gold to the value of £27,881 won during 1906. Notwithstanding this, the production for 1907 shows a considerable falling-off, due doubtless to the general disruption of the coal-mining industry, which indirectly affected gold-mining interests, and also to the fact that no new discoveries have been made.

The introduction of the systems of dredging and sluicing has awakened considerable activity in certain districts where gold is being saved from the beds of rivers and creeks, and also from wet lands where the ordinary alluvial miner experienced considerable difficulty in working. The initial cost of these undertakings is heavy, but, on the other hand, the large quantity of material that can be treated at a small cost, and the saving in labour, more than compensate for it. With the present improved appliances it is possible to treat profitably alluvial drifts containing only 1 or 2 grains to the ton, while a large percentage of gold, and particularly of fine gold, is obtained by operating over alluvial drifts worked in a crude way.

In 1900, large areas were taken up for dredging for gold and tin, and notwithstanding that many of the dredges were working only for short periods in the year, results were very satisfactory. The following table demonstrates the progress made since the inauguration of dredging in this State:—

Year.	Area under Lease at 31st Dec.	Gold.		Stream-tin.	
		Quantity.	Value.	Quantity.	Value.
	acres.	oz.	£	tons.	£
1900	6,943	8,882	33,660	.....	.....
1901	8,702	23,585	89,628	.....	.....
1902	11,719	25,473	97,891	110	8,300
1903	9,015	27,237	104,303	244	20,100
1904	9,855	32,345	123,656	319	26,180
1905	13,571	35,388	136,090	532	50,904
1906	15,595	36,649	141,101	1,032	120,661
1907	16,614	39,946	153,498	1,692	176,212
Total ...	.....	229,505	879,827	3,929	402,357

This system of mining has made steady progress during each year of the period, the increase in the number of dredges in operation, coupled with a better understanding of local conditions, contributing materially to this satisfactory result. The area released for dredging at the 31st December, 1907, was 16,614 acres, as compared with 6,943 acres in 1900; and during the same period the number of dredges in operation increased from 22 to 69, the value of the latter being set down at £335,000. Araluen is the principal centre of gold-dredging operations, and here, during the

past seven years, gold to the value of £391,336 has been recovered. The other districts which have contributed are Adelong, Stuart Town, Sofala, Wellington, Tumbarumba, and Nerrigundah.

The returns from 22 "bucket" dredges show that 5,058,166 cubic yards of material were treated, the gold won amounting to 26,847 oz., valued at £104,425, or an average of 2·55 grains, worth 4·95d., for every yard. From returns of 7 "pump" dredges, it appears that 1,470,378 cubic yards of material were operated on, and yielded 13,093 oz. of gold, valued at £49,048, or an average of 4·27 grains, worth 8d., per cubic yard treated. Information as to cost of working is not given, but it appears that pump dredging is more expensive than the bucket system. While it is possible for two men to work a bucket dredge, eight are required for pumping or sluicing. Under certain conditions, however, the pump dredge is more effective than the bucket dredge. Where the bed rock or bottom is hard and uneven, the bucket dredge fails to recover the gold lodged in crevices, while in deposits exceeding 50 feet in depth the hydraulic sluice is also found more effective.

The number of men employed in alluvial and in quartz mining during the last ten years, and the production from each branch of the industry, are set down below. The particulars of production are based on information obtained in the various localities, but owing to the non-receipt of detailed returns in some instances, and to the difficulty in obtaining accurate data respecting all the gold won, the quantity of the metal, as returned by the wardens and mining registrars, does not agree with the total amount actually recorded. The quantities of quartz and alluvial, although only approximate, are considered, however, sufficiently accurate for all practical purposes:—

Year.	Number of Miners.		Production.	
	Alluvial.	Quartz.	Alluvial.	Quartz.
	No.	No.	oz.	oz.
1898	8,303	11,616	65,889	262,951
1899	8,030	11,318	84,767	375,033
1900	8,387	9,571	64,125	245,759
1901	5,409	6,655	57,293	156,396
1902	5,434	5,176	55,349	134,967
1903	5,906	5,341	69,413	226,365
1904	5,253	5,395	79,040	245,956
1905	5,091	5,218	80,512	248,235
1906	4,255	4,561	78,690	223,866
1907	3,250	4,218	76,478	212,565

The above figures show clearly that since 1900 gold-mining has not received much attention from capitalists and miners. Owing to the high market prices of many of the other metals, there has been less prospecting for gold than formerly. All the men employed in quartz-mining are Europeans, but on alluvial fields 244 Chinese found occupation in 1907.

The principal seats of alluvial gold-mining are the Bathurst and Mudgee districts; the country watered by the various feeders of the Upper Lachlan; the Braidwood, and Tumut and Adelong districts; and in the north of the State, the New England district.

The principal quartz veins worked in New South Wales during 1907 are situated near Adelong, Armidale, Bathurst, Cobar, Forbes, Hillgrove, Orange, Pambula, Parkes, Peak Hill, Wellington, and Wyalong. The

districts which produced the largest quantities of gold during 1907 were:—

District.	Ounces.
Cobar and Mt. Drysdale ... ..	58,399
Wyalong and West Wyalong ... ..	20,347
Wellington ... ..	15,822
Adelong ... ..	14,215
Araluen... ..	11,859
Hillgrove (including Metz) ... ..	11,777
Murrumburrah... ..	9,931
Stuart Town ... ..	8,230
Peak Hill ... ..	7,255

In addition to the Mount Drysdale gold-field, in the Cobar district, discovered in 1893, the most important find of recent years was made at Wyalong, in the Lachlan district, where the largest amount of gold won in 1897, 1898, and 1899 was obtained.

For the period 1897-9 the production of Wyalong was the highest from any one field; but the yearly output since 1900 has been exceeded by that of the Cobar and Mount Drysdale field.

The Cobar and Mount Drysdale district now holds the premier position as a gold-field, the yield exceeding that of Wyalong for the first time during 1900 by 12,251 oz. The gold won at Cobar averages £3 18s. 5d. per oz., as compared with £3 10s. at the latter place. Much of the success of this field during the last seven years was due to the operations of the Cobar Gold Mines Company (Limited) and the Mount Boppy gold-mine, at Canbelego, and the results obtained at this mine during the last few years place it in the first rank as regards production. The annual gold yield for the Cobar district since 1900 is shown below:—

Year.	Quantity.	Value.
	oz.	£
1900	44,676	157,108
1901	42,299	145,146
1902	26,956	90,209
1903	79,860	266,355
1904	69,140	262,213
1905	70,109	230,386
1906	68,685	224,052
1907	58,399	228,981

The low yield in 1902 was due to the cessation of work at most of the mines for varying periods on account of drought, and the decreases exhibited in 1904 and subsequent years, when compared with 1903, were caused by the restricted operations of the Cobar gold-mines, where, owing to the copper zone being reached, the hands employed have been considerably reduced, pending the adoption of another method for economically treating the gold-copper ore now in sight. Prospecting was continued with much energy throughout the year.

The gold found in New South Wales is never absolutely pure, always containing traces of other metals, such as copper, iron, and bismuth, and often a fair percentage of silver. To the presence of silver its light yellow colour is due. New South Wales gold is generally lighter in colour than Victorian, but is of a deeper yellow than that found in the fields of Southern Queensland. Its specific gravity averages about 17·5.

The average weight of the metal obtained per miner in 1907 was 38·70 oz., as compared with 34·32 oz. in the previous year. The values of these quantities equal £140 13s. 11d. and £122 7s. 6d. respectively for each miner engaged, and these figures compare very favourably with

the averages obtained during the past ten years, namely, 23·71 oz. per miner, valued at £84 8s. 6d. It must not be supposed, however, that these figures represent the total earnings of the men engaged in gold-mining. Many of the miners follow other pursuits during a portion of the year; further, there were several new fields which so far had yielded very small returns, and a number of men were engaged in prospecting.

The number of fatal accidents in gold-mines during 1907 was only 5, as against 4 in the previous year. Two men lost their lives in auriferous quartz-mining, and 3 in alluvial workings. Ten serious accidents occurred in quartz-mines, and 2 in connection with dredging.

#### SILVER.

Up to the year 1882 the quantity of silver raised in New South Wales was very small. In that and following years, however, extensive discoveries of the metal, associated principally with lead and copper ores, were made in various parts of the State, notably at Boorook, in the New England district, and, later on, at Sunny Corner, near Bathurst, and at Silvertown, Broken Hill, and other places on the Barrier Range.

The greatest achievement in connection with silver-mining in this State is the profitable extraction of zinc from the immense heaps of tailings which have accumulated since the opening of the Broken Hill mines about twenty-five years ago. The formation of a company to recover the zinc contents of large quantities of tailings, and the steps taken by other mining companies, notably the Broken Hill Proprietary Company, have added greatly to the vast wealth of minerals extracted from this field, and, in addition, point to this State becoming in the near future one of the principal producers of spelter.

The argentiferous lead ores of the Barrier Ranges and Broken Hill districts of New South Wales have, more than any other, attracted attention. This rich silver-field, which was discovered in 1883 by Charles Rasp, a boundary rider on Mount Gipps run, extends over 2,500 square miles of country, and has developed into one of the principal mining centres of the world. It is situated beyond the river Darling, and on the confines of South Australia. In the Barrier Range district, the lodes occur in Silurian metamorphic micaceous schists and banded gneisses, intruded by granite, porphyry, and diorite, and traversed by numerous quartz reefs, some of which are gold-bearing. The Broken Hill lode is the largest as yet discovered. It varies in width from 10 feet to 200 feet, and may be traced for several miles, the country having been taken up all along the line of the lode, and subdivided into numerous leases, held by mining companies and syndicates.

The total value of minerals exported from the Barrier district during 1907 was £3,097,121, distributed as follows:—Silver-lead ore, 378,167 tons, £2,727,620; copper ore, 540 tons, £4,461; zinc concentrates, 190,981 tons, £364,791; tin ore, 44 cwt., £249.

As a natural consequence of the success of the Broken Hill mines, numbers of miners were attracted to the district, and the population, which in 1883 consisted of only a few station hands, had risen at the date of the 1901 census to a total of 28,887 souls, of whom 6,320 men were employed in and about the mines. The population of the municipality at the end of 1907 was estimated at 33,590, and 8,820 persons were permanently employed on the mines.

The production of silver and lead and employment are both largely influenced by the prices of those metals in the markets of the world. Thus, in 1906 and 1907, when prices were high, the number of men employed was higher than at any previous time. Zinc recovery is the most important question at the present time, and it is satisfactory to

record that the output of zinc concentrates during 1907 amounted to 190,981 tons, valued at £364,791, or about twice the value of the output for the year 1906.

The question of determining the metallic contents of the silver and silver-lead ores mined in this State has always been extremely difficult, owing to the absence of reliable data, and also to the fact that only a small percentage of the ore won is treated within the confines of New South Wales. The figures published by the Broken Hill Proprietary Company have in the past enabled rough approximations to be made, but the results arrived at have not been satisfactory. For the past five years, however, the Department of Mines has been enabled to collect from the various mine managers, smelting companies, and ore buyers in Australia particulars of the metallic contents of all New South Wales ores treated, the results being shown below :—

Contents, &c.	1903.	1904.	1905.	1906.	1907.
Silver (fine oz.) ... ..	6,489,689	7,751,667	6,804,934	5,575,410	5,921,457
Lead (tons) ... ..	92,293	106,038	93,182	79,925	79,870
Zinc (tons) ... ..	286	299	544	1,008	984
Value of above ... ..	£ 1,790,929	2,088,784	2,131,317	2,112,977	2,228,420

In addition to the ore treated within the Commonwealth, the results of which are shown above, concentrates are exported to Europe for treatment. The quantity and value of these, together with the estimated gross silver, lead, and zinc contents, based on average assays, are shown hereunder :—

Year.	Concentrates, &c., exported.		Estimated Metallic contents.		
	Quantity.	Amount received.	Silver.	Lead.	Zinc.
	tons.	£	oz.	tons.	tons.
1903	76,824	308,714	1,736,512	29,706	14,625
1904	149,464	642,125	2,945,058	59,507	22,318
1905	270,474	1,181,720	3,480,561	69,044	30,637
1906	165,151	1,876,834	3,111,013	58,683	33,427
1907	337,823	3,574,775	6,228,225	111,830	76,645

In connection with the above figures it should be mentioned that, although the metallic contents are based on average assays, it is impossible to say what proportion of the same was recovered.

From the previous tables it will be seen that the estimated quantities of silver, lead, and zinc contained in the sulphide ores won during the last five years are as follows :—

Year.	Silver.	Lead.	Zinc.
	fine oz.	tons.	tons.
1903	8,226,201	121,999	14,911
1904	10,696,725	165,545	22,617
1905	10,285,495	162,226	31,181
1906	8,686,423	138,608	34,435
1907	12,149,682	191,700	77,629
	50,044,526	780,078	180,773

This State, however, is not entitled to take credit for the full value of the finished product, as large sums are expended outside New South Wales in extracting the silver, lead, and zinc. For this reason, the production of silver and lead is set down at the value of the quantities exported as declared to the Customs authorities.

The quantity and value of silver and silver-lead ore exported from New South Wales to the end of 1907 are shown in the following table:—

Period.	Silver.		Silver-sulphides, Silver-lead, and Ore.			Total Value.
	Quantity.	Value.	Quantity.		Value.	
			Ore.	Metal.		
	oz.	£	tons	tons	£	£
Up to 1885	1,730,297	382,884	7,074	191	237,810	620,694
1886-1890	2,481,253	464,081	165,756	94,002	6,478,515	6,942,596
1891-1895	3,009,187	445,873	663,754	231,847	12,615,432	13,061,305
1896-1900	2,352,092	269,663	1,771,983	86,005	9,592,856	9,862,519
1901-1905	4,154,020	445,051	1,877,515	108,353	8,910,586	9,355,637
1906	284,994	36,431	349,720	22,218	2,826,542	2,862,973
1907	2,043,887	257,314	413,720	20,360	3,658,632	3,915,946
Total...	16,055,730	2,301,297	5,249,522	562,976	44,320,373	46,621,670

As the bulk of the silver has been exported in the form of silver-lead bullion and ore, it is impossible to ascertain the quantity of pure silver won except for the last five years. The net value of the ores won during these years is set down at £12,839,914, and from the tables already given it will be seen that the estimated gross silver and lead contents amounted to 50,044,526 oz. fine and 780,078 tons respectively; but owing to the absence of similar data for previous years, and also the great improvements effected during recent years in the method of extraction and treatment of the ores generally, it is impossible to state with any degree of accuracy the metallic contents of the total production of the State.

Owing to the steady fall in the price of the metal, which had already set in before the opening up of the Broken Hill mines, and which, after a slight recovery in 1890, has continued with slight fluctuations, the value of the output has greatly diminished. In 1890 the price of silver was 47½d. per oz. standard; in 1893, when the Indian mints were closed, the price was 35½d., and this fell to 29d. in 1894; while in 1907 the average for the year was only 30d. per oz. The variations in the price of lead have likewise affected the value of the output. From 1904 nearly to the end of 1907 the price rose with corresponding benefit to the industry.

The number of miners engaged in silver and silver-lead mines in 1907 was 10,021, and the average value of mineral won per miner engaged was £390 15s. 6d. A comparison with the figures of the last ten years is afforded by the following table:—

Year.	Miners.	Value of Silver and Lead won.	
		Total.	Per Miner.
	No.	£	£ s. d.
1898	6,396	1,704,055	266 8 6
1899	7,893	2,070,657	262 6 10
1900	8,196	2,604,117	317 14 7
1901	6,298	1,854,463	294 9 1
1902	5,382	1,440,179	267 11 10
1903	6,035	1,501,403	248 15 8
1904	7,071	2,065,540	292 2 3
1905	7,887	2,494,052	316 4 6
1906	9,414	2,862,973	304 2 5
1907	10,021	3,915,946	390 15 6

The total number of accidents which occurred in the silver-mines of the State in 1907 was 51, 18 persons losing their lives, while 33 were seriously injured. Cases of slight injury are not recorded.

## COPPER.

The principal deposits of this metal are found in the central part of the State, between the Macquarie, Bogan, and Darling Rivers. Deposits have also been found in the New England and Southern districts, as well as at Broken Hill, showing a wide distribution. The copper-mining industry is of considerable importance, and reached its highest point of production in 1906, when the output was valued at £789,527. Until 1902, the year of highest production was 1883, when copper to the value of £472,982 was obtained; but in subsequent years the industry rapidly declined through the heavy fall in the price of the metal. Some of the mines which had been worked for several years were closed. In 1894, the production was valued only at £63,617, and that year saw the lowest point of depression in the copper market, the average price for the year being only £40 per ton. During the last decade copper-mining has shown very satisfactory progress, and the average production is much in advance of that of any other similar period. During 1904, the output was valued at £406,001, as compared with £462,640 for the previous year, due mainly to the cessation of productive work at one of the principal mines in the Burruga district; but conditions have decidedly improved, and the mine is again in full operation. With copper at a high price, it was to be expected that the mining for this metal would come in for considerable attention. The value of the copper production during 1907 was £727,774, as compared with £789,527 for the previous year—a decrease of £61,753. The production during 1906 excepted, the returns for 1907 largely exceed that of any other year. The decrease in the value is attributed to the great fall in the price of the metal during the closing months of the year and to the lessened output from the Cobar district. The copper lodes of New South Wales contain ores of a very much higher grade than those of many well-known mines worked in other parts of the world, and, with a fair price, should return satisfactory results. The net export of copper, which is taken as the production of the State, is shown below from the year 1858:—

Period.	Value.	Period.	Value.
	£		£
1858-1879	1,067,670	1905	527,403
1880-1884	1,554,326	1906	789,527
1885-1889	778,804	1907	727,774
1890-1894	454,765		
1895-1899	1,286,094	Total ...£	9,200,403
1900-1904	2,014,040		

The most important mines are those of Cobar, where the Great Cobar, which recommenced work early in 1894, is the principal mine.

The output of metals from this district during the last six years is shown hereunder:—

Metals.	1902.	1903.	1904.	1905.	1906.	1907.
	£	£	£	£	£	£
Gold ... ..	90,209	266,355	262,213	231,418	224,052	229,143
Silver ... ..	3,688	5,089	5,033	9,366	10,034	10,117
Copper ... ..	130,802	221,242	236,510	444,858	516,320	474,681
Lead ... ..	.....	.....	.....	3,000	17,416	4,258
Totals ... ..	224,699	492,686	503,756	688,642	767,822	718,199

In other portions of the Cobar district considerable activity has been displayed. At Nymagee very satisfactory progress has been made, and copper to the value of £236,845 was produced during the last three years. Recent developments favour the opinion that the auriferous copper ores at the Cobar gold-mines and other mines will at no distant date be worked in conjunction with one or other of the richer copper mines of the district.

The Mount Hope mine recovered copper to the extent of £18,300. The Lloyd copper-mine, in the Burranga district, treated some 48,000 tons of material, and obtained 1,154 tons of copper, valued at £98,000. The production during 1906 was valued at £100,000.

The total number of miners engaged in copper-mining in 1907 was 3,764, as against 3,047 in 1906, 2,171 in 1905, 1,850 in 1904, and 1,816 in 1903. It may be mentioned that the number of men finding employment in 1896 was only 810; this figure rapidly increased to 3,334 in 1900, but fell away to 2,964 in 1901, and 1,699 in 1902. There was one fatal accident recorded in copper-mining in 1907, and twenty-four miners were seriously injured.

#### TIN.

Lode tin occurs principally in the granite country and stream tin under the basaltic formation in the extreme north of the State—at Tenterfield, Emmaville, Tingha, and in other districts of New England. The metal has also been discovered in the Barrier district, at Poolamacca and Euriewie; near Bombala, in the Monaro district; at Gundle, near Kempsey; at Jingellic and Dora Dora, on the Upper Murray; and in the valley of the Lachlan; but in none of these districts has it been worked to any extent. Although the first discovery was made by the Rev. W. B. Clarke as far back as 1853, the opening of tin-fields did not take place until the year 1872. The value of production since that date has been as follows:—

Period.	Value.	Period.	Value.
	£		£
1872-1879	2,015,407	1905	226,110
1880-1884	2,194,533	1906	255,744
1885-1889	1,415,374	1907	293,305
1890-1894	677,392		
1895-1899	342,503	Total...£	8,037,814
1900-1904	617,446		

Tin has contributed in a very considerable degree to the total production of the mineral wealth of the State, and in point of value its aggregate yield stands in the fifth place—next to gold, coal, silver, and copper. From the opening of the fields the production increased rapidly until 1881, when in value it almost equalled the output of gold for the year, and was but slightly behind coal. During the twenty years from 1881 to 1902 the industry experienced several vicissitudes, chiefly owing to dry weather and fluctuations in the price of the metal.

The increased production since 1902 is due to the activity which has characterised tin-mining on the various fields throughout the State, owing to the satisfactory prices obtained. A feature of the industry is the success achieved by the operations of the dredges. The principal leads worked during 1907 were at Tingha; at Elsmere, in the Inverell district; at the Mann River, near Glen Innes; at Vegetable Creek, near Emmaville; at Deepwater; and at Wilson's Downfall.

Dredging for tin-ore has become a firmly-established industry, and during 1907 twenty-eight pump dredges, operating on the stanniferous gravels in the Tingha and Inverell divisions, recovered 1,439 tons of stream tin, valued at £151,080. Four plants operating in the Emmaville

division obtained 100 tons of stream tin as the result of the year's work; the value is set down at £8,895. The dredges operating in the Wilson's Downfall division recovered 94 tons, valued at £9,550. There were also several smaller plants operating in the Deepwater, Bendemeer, and Germanton divisions; and, in addition, a quantity of stream tin was saved by several of the gold dredges. In all, tin-ore to the extent of 1,692 tons, valued at £176,212, was recovered during 1907, an increase in value of £55,551 being shown as compared with the output from this source in the previous year. Within the thirty-six years that have elapsed since the opening of the tin-fields, the value of the net export, which is regarded as the production, has been £8,037,814.

In the alluvial tin-fields of Tingha and Emmaville, the number of Chinese engaged in this industry has in some years greatly exceeded that of the Europeans. In 1907, however, the Chinese at Emmaville numbered only 68, whilst the Europeans numbered 650; at Tingha, 1,400 Europeans and 259 Chinese were engaged in tin-mining. The total number of miners employed in tin-mining in the State was 3,173, viz., 2,739 Europeans and 434 Chinese, all of whom were employed in the Northern districts. In 1906, 3,157 Europeans and 638 Chinese were engaged in the industry.

No serious accidents occurred during 1907 in tin-mining.

#### IRON.

Iron is widely diffused throughout the State, and occurs principally in the form of magnetite, brown hematite or goethite, limonite, and bog-iron. Deposits of chrome iron are also found. Magnetite is the richest of all the iron ores, and, when pure, contains a little over 72 per cent. of available metallic iron, though it is not often found reaching this very high percentage. These ores are widely distributed throughout New South Wales. The results of a number of analyses made from deposits at Brown's Creek, in the county of Bathurst, where veins were opened out a few years ago, show that the samples of ore yielded from 48·83 to 61·30 per cent. of metallic iron.

Brown hematite or goethite occurs in very extensive deposits in the Blue Mountain and Macquarie Ranges, the principal centres so far explored being situated at Mittagong, Picton, Berrima, Cadia (near Orange), Lithgow Valley, Wallerawang, in the Rylstone and Mudgee districts, and in the vicinity of Port Stephens. The result of a number of analyses of this kind of ore denotes that it is very rich in metallic iron, containing a proportion of 42·69 to 64·48 per cent., and in the majority of cases over 45 per cent. of metal. A sample of hematite from the Maitland district contained 60·83 per cent. of metallic iron, and another from Mount Pleasant, near Wollongong, analysed during 1891, gave 54·28 per cent. of iron. The value of these deposits is enhanced by their almost invariable occurrence in proximity to limestone and coal beds. It is fortunate, also, that the main lines of railway pass through the regions where the deposits are most easily worked.

Limonite—a variety of brown hematite—occurs principally at Lithgow, Eskbank, and Bowenfels, in the Blue Mountains; in several parts of the Hunter River coal-field; and at Bulli, in the Illawarra district. This ore is usually found very rich in metal, and contains an average of over 50 per cent. of iron, while the English clay bands, which are mostly carbonates, contain only about 30 per cent. of metallic substance. It occurs in lenticular layers of no great extent, in the Coal Measures. Bog-iron ore, which is impure limonite, is found principally at Mittagong; and assays of this ore gave an average percentage of metal of more than 45 per cent.

The following table, taken from a report furnished during 1905 by Mr. E. F. Pittman, Government Geologist, gives the description and estimated quantity of iron-ore available in the various districts of New South Wales where the deposits occur:—

District.	Description of Ore.	Estimated minimum quantity of Ore.
		tons.
Bredalbane ... ..	Brown ore and hematite ... ..	700,000
Cadia ... ..	Specular hematite, magnetite, and carbonate ore.	39,000,000
Carcoar ... ..	Hematite and brown ore ... ..	3,000,000
Chalybeate Spring — Deposits of Southern District.	Brown ore ... ..	1,510,000
Cowra (Broula)... ..	Magnetic ore ... ..	100,000
Goulburn ... ..	Brown ore ... ..	1,022,000
Gulgong ... ..	Magnetic ore ... ..	120,000
Mandurama and Woodstock ... ..	Brown ore ... ..	609,000
Marulan ... ..	Brown ore and hematite ... ..	40,000
Mudgee ... ..	Brown ore with manganese... ..	150,000
Newbridge, Blayney, and Orange ... ..	Brown ore and magnetic ore ... ..	150,000
Queanbeyan (Paddy's Point) ... ..	Magnetic ore ... ..	1,000,000
Rylstone and Cudgong ... ..	Brown ore ... ..	443,000
Wallerawang and Piper's Flat ... ..	Brown ore ... ..	200,000
Williams and Karuah Rivers... ..	Titaniferous magnetic ore ... ..	1,973,000
Wingello ... ..	Aluminous ore ... ..	3,000,000
	Total ... ..	53,017,000

The Cadia ironside beds—14 miles from Orange—have proved the most extensive yet examined. The ore comprises two classes, oxidised and unoxidised, the former of which consists of hematite and magnetite, and contains from 57 to 61 per cent. of metallic iron. A large proportion of the ore is of excellent quality and suitable for the manufacture of steel by the ordinary Bessemer and other acid processes, and compares favourably with some of the best American ores.

The deposits at Carcoar include brown ore, hematite, and magnetite. It is estimated that at least 3 million tons of ore are in sight, and it is probable that the deposit is capable of yielding 10,000,000 tons, or even a larger quantity, the ore containing about 52·67 per cent. of metallic iron.

Large quantities of iron ore have been raised from the deposits situated in the Marulan, Goulburn, Bredalbane, Mittagong, and Carcoar districts, and despatched to the smelting works at Dapto and Cockle Creek, where it has been used as flux, the gold contents of the ore helping to defray the extra cost of railway carriage. The estimated quantity of ironstone flux raised during the last five years is shown in the following table:—

Year.	Quantity.	Value.
	tons.	£
1903	22,120	15,834
1904	8,661	6,628
1905	6,801	4,525
1906	935	723
1907	10,659	7,707

The decreased output in 1905 is partly due to the closing down of the smelting works at Dapto. Only 935 tons, valued at £723, were obtained during 1906, and used at the Cockle Creek Smelting Works. The establishment of ironworks at Eskbank resulted in a greatly increased output in

1907. Parcels of iron oxide are still sent from the Fitzroy and other ironstone deposits in the Mittagong and Port Macquarie districts to the various gas-works of the Australian States and New Zealand, where it is used in purifying gas.

#### ANTIMONY.

Deposits of antimony occur in the State in various places, chiefly in the Armidale, Bathurst, and Rylstone districts; and at Bowraville, on the North Coast. The principal centre of this industry is at Hillgrove, near Armidale, where the Eleanor Mine, one of the richest in the State, is situated. The output during 1907 was confined mainly to this district, where it is found that the metal can be profitably extracted owing to its association with gold. The results of a number of analyses of antimony ore, made by the authorities of the Geological Museum, show from 16.5 to 79.45 per cent. of metal; but, notwithstanding these encouraging assays, the price has never been, until recently, sufficiently high to stimulate production to any extent. The satisfactory price of the metal, which rose to £25 per ton in May, 1906, was the cause of numerous long-abandoned claims being reoccupied, and mining operations were carried on with great activity throughout the year on the Hillgrove field, and also at Bowraville, where several leases have been secured. The value locally of 50 per cent. ore during the first three months of 1907 was £25 per ton; by the end of May, however, the value had receded to £5 per ton, and with the exception of a sudden rise to £12 in October, it remained low. The supplies consequently fell off, and at the end of the year no ore was coming forward. Prospectors were successful in obtaining small quantities of ore in the Kookabookra, Uralla, Maitland, and Barraba divisions, and in the Copmanhurst district. A considerable quantity of ore was raised some years ago at the Corangula Mines, in the Macleay district, but these are at present closed down. Lodes have also been opened and partly worked near Nambucca, Drake, Gulgong, and Razorback. The value of antimony raised during 1907 was £46,278, as compared with £52,645 in 1906. The total quantity raised up to the end of 1907 is set down at 16,116 tons, valued at £299,557.

#### MANGANESE.

Deposits of manganese ore have been discovered in various parts of New South Wales. Pyrolusite, in the form of black oxide and manganese dioxide, occurs principally in the Bathurst districts and at Bendemeer. Wide veins have also been found in the Glen Innes district, near the Newton-Boyd road. Some of the specimens analysed have yielded a very high percentage of metal; but the demand for manganese in the State is very small, and unless it increases, or until a foreign market is found, the rich deposits of this ore will remain comparatively untouched. The ore is found extensively in conjunction with iron in coal and limestone country, and often contains a small percentage of cobalt.

The value of manganese raised to the end of 1907 is set down at £1,655, the last year of production being 1903, when only 72½ tons, valued at £254, were raised.

#### BISMUTH.

Bismuth is found associated with molybdenum and gold, in quartz-veins, chiefly in the neighbourhood of Glen Innes. The principal mines are situated at Kingsgate, the mineral occurring in a granite formation, associated with molybdenum, mispickel, and tin. The total quantity

of this metal exported during 1907 was 16 tons, valued at £5,268. Rich argentiferous ores have been obtained, the lodes consisting of soft granular felspar matrix, impregnated with blotches of bismuth, molybdenum, and chloride of silver. The largest mass of native bismuth yet discovered in the State weighed nearly 30 lb., and was obtained in the Kingsgate mine. The value of this metal exported up to the end of 1907 was £119,882.

#### MOLYBDENUM.

Molybdenite, the principal ore of molybdenum, occurs most plentifully in pipe-veins at Kingsgate, near Glen Innes, and in the Jingera Mineral Proprietary mines at Whipstick, near Pambula; in both these localities it is associated with ores of bismuth. Molybdenum is used chiefly in the preparation of special steels, its influence being similar to that of tungsten, but it gives greater toughness, and the steel so treated is more readily worked when hot, and stands hardening better than tungsten steel. The output during 1907 was confined to the Kingsgate district, the quantity exported during the year being valued at £3,564, as compared with £4,798 in 1906.

#### PLATINUM.

Platinum and the allied compound metal iridosmine have been found in New South Wales, but so far in inconsiderable quantities, the latter occurring commonly with gold or tin in alluvial drifts. Mining operations were confined in 1907 to the Fifield gold-field, in the Parkes district, where the metal is found associated with the gold in washdirt. The total yield of platinum for the year was 276 oz., as compared with 205 oz. in 1906. The Fifield platinum occurs in coarse, shotty grains. The quantity of platinum produced during 1907 was valued at £1,014, and to the end of that year, £18,554.

#### CHROMIUM.

Chromium, usually associated with serpentine, is found in the northern portion of New South Wales, in the Clarence and Tamworth districts, and also near Gundagai. The principal mines are at Mount Lightning, in the Mooney Mooney Ranges, about 18 miles from Gundagai. The chrome mining industry is of very recent date, but the low price obtainable has prejudicially affected the industry. The quantity produced during 1899, 5,243 tons, valued at £17,416, is the highest recorded as the annual output. In 1900 the production fell to 3,285 tons, valued at £11,827, the decrease being due to the exhaustion of the smaller deposits. During 1907 only 30 tons, valued at £105, have been disposed of for use in the lining of furnaces. The production up to 1903, and the production during the last five years, were as follows:—

Year.	Quantity.	Value.
	tons.	£
Up to 1902 ... ..	28,218	92,316
1903 ... ..	1,951	7,342
1904 ... ..	397	1,268
1905 ... ..	52	62
1906 ... ..	15	15
1907 ... ..	30	105
Total ... ..	30,663	101,108

## OTHER METALS.

Mercury, in the form of cinnabar, has been discovered on the Cudgegong River, near Rylstone, and it also occurs at Bingara, Solferino, Yulgilbar, and Cooma. In the latter place the assays of ore yielded 22 per cent. of mercury. As an encouragement in the search for quicksilver ores, the Department of Mines has offered to pay a reward of £500 to the first person or company producing 50,000 lb. of quicksilver from ores raised in New South Wales. During 1903, 40 tons of ore were treated, yielding 1,010 lb. of quicksilver, valued at £126; but there has been no further production.

Deposits of cobaltiferous minerals have been found at Bungonia, Carcoar, and Port Macquarie; but the market for the metal is small, and no attempt has yet been made to produce it on a large scale. The only deposits worked during recent years are at Port Macquarie, where the ore occurs in nests or pockets in serpentine and the overlaying clays resulting from its decomposition; but as the ore is of irregular occurrence, and does not permit of profitable working, operations were discontinued during 1904. An average sample assayed cobalt oxide 7.48, and nickel oxide 1.36, and a picked sample showed cobalt oxide 7.03, and nickel oxide 2.39 per cent. The output of cobalt during 1904—the last year of production—was valued at £60, as against £1,570 for the preceding year. The value of the total production to the end of 1904 was £7,955.

Tellurium has been discovered at Bingara and other parts of the northern districts, as well as at Tarana, on the Western line, though at present only in small quantities, which would not repay the cost of working. It has also been found at Captain's Flat, in association with bismuth.

Selenium has been discovered at Mount Hope, also in association with bismuth.

Wolfram and scheelite, generally associated with other minerals, such as tinstone (cassiterite), bismuth, and molybdenite, occur in many parts of New South Wales. The deposits, as a rule, have been found too patchy for profitable working, and as the market is limited, very little has been done in the way of production. The steady demand that has existed during the last few years for tungsten ores has, however, stimulated the search for payable deposits, especially in the Peel, Uralla, and New England districts. Practically all the scheelite was produced in the Hillgrove district during 1907, the ore being of good quality and carrying a large percentage of tungstic acid. During the year 196 tons, valued at £23,781, were exported. Wolfram ore was mainly obtained during the year in the vicinity of Deepwater and Emmaville, where, owing to the increased demand for tungsten minerals and the high price ruling, prospecting was vigorously prosecuted. The quantity exported during 1907 was 207 tons, valued at £26,235.

Deposits of pigments are found near Mudgee and Dubbo, and also in the Orange district, where a fair quantity of the raw material, consisting principally of purple oxide and yellow ochre, has been produced.

## MINERALS—COAL.

Among the varied mineral resources of New South Wales, coal is the most important, for not only is the quality of the mineral superior to that found in the other States, but the carboniferous formations are of much greater extent than in any other part of Australia. The area over which the mineral is distributed in this State has been computed at from 24,000 to 28,000 square miles; but the limit within which the Coal Measures are considered productive is set down at 16,550 square miles,

and the Government Geologist has estimated the quantity of coal underlying this area, down to a depth of 4,000 feet, at 115,347 million tons. This estimate allows for one-third loss in working; but no account has been taken of the Coal Measures of the Clarence basin, or of the area to the west of a line stretching from Dubbo to Texas. The coal in these districts is probably suitable for local requirements; but its quality is not sufficiently good for purposes of export, and it would be expensive to work by reason of the numerous bands of shale which occur in the seams.

At present the coal-mining industry is confined to those centres which, from their close proximity to ports of shipment and to the railway lines, afford ready means for distribution.

In 1826, the Australian Agricultural Society obtained from the Crown a grant of 1,000,000 acres of land, together with the sole right of working the coal-seams which were known to exist in the Newcastle district. Several mines were opened up, and profitably worked for a number of years; but it was not until the expiration, in 1847, of the monopoly enjoyed by the company, that the coal-mining industry showed signs of extensive development.

During that year the output of coal reached a total of 40,732 tons only, valued at £13,750. Six years afterwards the production was doubled, and the output has rapidly increased year by year, until coal-mining is now one of the staple industries of the State, the production for the year 1907 amounting to 8,657,924 tons, valued at £2,922,419. This quantity is the largest output recorded, exceeding that of the previous year by a million tons. The average price secured was 6s. 9d. per ton, and the value of the production was £585,192 in excess of that raised in 1906, when prices were 10 per cent. lower. The total production to the end of the year 1907 was 138,678,149 tons, valued at £53,279,162.

If the experience of the world at large can be taken as any criterion for the States of the Commonwealth, New South Wales should easily assume first rank as a manufacturing State. Generally speaking, those countries which are the largest coal producers are also the largest manufacturers. Newcastle, the centre of the local coal trade, is singularly well fitted by situation to become the port of supply for all the countries of the southern seas. Every week coal-laden vessels leave its wharfs, not only for the Australian States, but for New Zealand, China, India, the Pacific Slope of North and South America, Mauritius, the Cape of Good Hope, and other lands. Ample provision has been made by the Government for shipping coal, and over 2 miles of wharfs, furnished with cranes and shoots capable of loading over 25,000 tons per day, line its shores.

The markets of the State are likewise supplied with excellent coal from the seams worked in the Illawarra district, the product of which is also exported in large quantities.

The deposits which have been found in the Blue Mountains, near the line of railway, at Katoomba, Lithgow, Wallerawang, and elsewhere, supply a portion of the requirements of Sydney and other industrial centres in its neighbourhood, as well as part of the western district of the State. Coal is also mined in the Berrima district, whence a large quantity of the coal consumed in the southern parts of the State is obtained.

The number of coal-mines under inspection in New South Wales at the end of the year 1907 was 104, and these gave employment to 17,080 persons, of whom 13,369 were employed under and 3,711 above ground. The average quantity of coal extracted per miner was 648 tons, as against an average of 658 tons for the previous year, and 600 tons for 1905.

The quantity of coal raised in New South Wales and the number of coal-miners employed during each of the last ten years are stated below. Calculated on the total value of the coal produced during the decade, the

average quantity of 601 tons extracted yearly by each person employed underground represents a value of £196 0s. 11d., and for the total number of persons employed, 474 tons, valued at £154 12s. 5d. In 1907 the average value of production was £218 14s. for each person employed underground, and £171 2s. 3d. for each person employed in any capacity about the mines:—

Year.	Persons employed in and about mines.	Persons employed underground.	Quantity of Coal raised.		
			Total.	Per person employed in and about mines.	Per person employed underground.
	No.	No.	tons.	tons.	tons.
1898 ... ..	10,258	8,192	4,706,251	459	574
1899 ... ..	10,339	8,217	4,597,028	445	559
1900 ... ..	11,333	9,000	5,507,497	486	612
1901 ... ..	12,191	9,644	5,968,426	489	619
1902 ... ..	12,815	10,050	5,942,011	464	591
1903 ... ..	13,917	10,910	6,354,846	457	582
1904 ... ..	14,034	11,122	6,019,809	429	541
1905 ... ..	14,019	11,054	6,632,138	473	600
1906 ... ..	14,929	11,588	7,626,362	511	658
1907 ... ..	17,080	13,369	8,657,924	507	648
Average for 10 years ...	13,092	10,315	6,201,229	474	601

A satisfactory feature of the coal trade is the very large quantity taken for local use, a result indicative of greater industrial activity. The increase is due to the growing requirements for smelting and other purposes.

*Northern District.*—In the Northern or Hunter River District the number of collieries under official inspection in 1907 was 70, employing 12,486 persons, 9,692 of whom were miners, wheelers, &c., employed underground. The quantity of coal raised amounted to 6,058,580 tons, valued at £2,231,901, or 70 per cent. of the whole production of New South Wales. This shows an increase of 722,392 tons on the figures of the previous year, the amount raised being the highest in any one year.

The following table shows the growth of the coal industry within the last ten years in the Hunter District. Both the number of men employed and the quantity of coal raised have, with trifling exceptions, increased steadily during the period:—

Year.	Persons employed in and about mines.	Persons employed underground.	Quantity of Coal raised.		
			Total.	Per person employed in and about mines.	Per person employed underground.
	No.	No.	tons.	tons.	tons.
1898	7,767	6,247	3,355,600	432	537
1899	7,815	6,249	3,259,708	417	522
1900	8,555	6,817	3,926,584	459	576
1901	9,157	7,258	3,999,252	437	551
1902	9,730	7,588	3,900,297	401	514
1903	10,461	8,161	4,410,565	422	540
1904	10,450	8,217	4,042,739	387	492
1905	10,505	8,265	4,645,742	442	562
1906	11,005	8,478	5,336,188	485	629
1907	12,486	9,692	6,058,580	485	625

*Southern and South-western District.*—In this district there were in 1907 seventeen collieries under official inspection, giving employment to 3,410 persons, of whom 2,671 were at work underground. These numbers exhibit an increase of 161 persons employed in and about the mines, and of 131 underground workers, as compared with those so engaged in 1906. There was also an increase of 52,030 tons in the production, the total quantity raised during the year being 1,835,425 tons, valued at £515,786. Owing to the demand for southern coal for steam purposes, the trade of this district has greatly improved during recent years. The increase would doubtless have been more pronounced but for the difficulty experienced in loading. To remove this drawback, the Government is making a harbour at Port Kembla, a few miles south of Wollongong. The work involves the construction of a breakwater 2,800 feet long, and the necessary shipping appliances, at a cost not to exceed £220,000, and when these are completed shipping operations will be greatly facilitated. Up to the 30th June, 1908, 1,960 feet of the breakwater had been completed, and the two jetties from which coal is to be shipped are already experiencing a fair measure of protection from the effects of the south-easterly and easterly gales that constantly sweep up the coast.

The history of coal production in the Southern district for the last ten years may be gathered from the following table:—

Year.	Persons employed in and about mines.	Persons employed underground.	Quantity of Coal raised.		
			Total.	Per person employed in and about mines.	Per person employed underground.
	No.	No.	tons.	tons.	tons.
1898	2,067	1,596	1,068,367	517	669
1899	2,121	1,636	1,119,503	528	684
1900	2,324	1,802	1,205,035	544	702
1901	2,499	1,946	1,544,454	618	794
1902	2,545	1,988	1,588,473	624	799
1903	2,887	2,255	1,476,005	511	654
1904	3,044	2,450	1,558,383	512	636
1905	3,050	2,397	1,556,678	510	649
1906	3,249	2,540	1,783,395	549	702
1907	3,410	2,671	1,835,425	538	687

*Western District.*—In the Western District, in 1907, there were 17 collieries under official inspection, giving employment to 1,184 persons, of whom 1,006 were at work underground. From the subsequent table, it is apparent that the output has largely expanded during the decade, the increase being due to more regular work, and to the absence of labour troubles, which retarded operations in the earlier years.

The average quantity of coal raised per miner is much greater in the Western collieries than elsewhere in the State. This is due to a variety of causes, but chiefly to the greater thickness of the seams and the more friable character of the coal, and to the circumstance that the coal-beds are almost horizontal, and generally at small depths. In some cases the coal is worked by means of adits or tunnels instead of shafts, so that the facilities for winning the mineral are much greater in these mines than in those of Newcastle. But though the output is greater per miner than in the other coal-mining districts, the price for hewing is lower, so that the earnings of the individual miner do not differ greatly wherever the mine is situated.

The following table shows the growth of coal production in the Western district during the last ten years. Situated in close proximity to the principal iron-fields of New South Wales, the future prospects of these mines will be greatly improved, since the manufacture of iron from the ore is now carried on in this part of the State:—

Year.	Persons employed in and about mines.	Persons employed underground.	Quantity of Coal raised.		
			Total.	Per person employed in and about mines.	Per person employed underground.
	No.	No.	tons.	tons.	tons.
1898	424	349	282,284	666	809
1899	403	332	217,817	540	656
1900	454	381	315,858	696	829
1901	535	440	424,720	812	965
1902	540	474	453,241	839	956
1903	569	494	468,276	823	948
1904	540	455	418,687	775	920
1905	464	392	429,718	926	1,096
1906	675	570	506,779	751	889
1907	1,184	1,006	763,919	645	759

The following table shows the average price of coal per ton in the various districts for the last ten years; in the average for New South Wales, allowance has been made for the quantity raised in each district:—

District.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Northern ...	5 8	6 2	6 4	8 4	8 4	8 1	7 2	6 4	6 5	7 4
Southern ...	4 9	4 11	5 5	5 3	5 9	5 8	5 7	5 0	4 11	4 7
Western ...	4 3	4 2	4 11	4 10	5 1	5 0	5 2	5 5	5 7	5 7
New South Wales	5 5	5 9	6 1	7 4	7 5	7 4	6 8	6 0½	6 1½	6 9

#### ACCIDENTS IN MINES.

There were 17 persons killed and 99 seriously injured during 1907, the number of cases terminating fatally being 4 less than in the previous year. For the decennial period ended 1907, the average annual loss of life in the British coal-mines was 1·29 per thousand, or at the rate of 229,910 tons of mineral raised for every fatal accident. In the New South Wales collieries, for the ten years ended 1907, the rate was 2·01 fatal accidents per thousand miners employed, and 232,873 tons of coal were raised for every life lost. The number of accidents in the coal and shale mines of the State, with the proportion of miners to each fatal and non-fatal case, is given herewith, as well as the quantity of mineral raised to each life lost and person injured:—

Year.	Accidents.		Number of miners employed to each person.		Number of tons of mineral raised to each person.	
	Killed.	Injured, including minor accidents.	Killed.	Injured.	Killed.	Injured.
1898	25	113	421	93	189,438	41,811
1899	10	154	1,052	68	463,375	30,089
1900	24	193	479	60	230,432	28,655
1901	17	207	730	60	354,306	29,098
1902	105	154	125	85	57,189	38,993
1903	13	121	1,086	116	491,509	52,807
1904	12	121	1,179	117	504,807	50,063
1905	24	115	589	123	277,932	58,003
1906	21	125	724	118	364,705	61,270
1907	17	160	1,021	108	512,074	54,408
Av'ge	27	146	496	91	232,873	42,659

The abnormal figures for 1902 were due to the Mount Kembla explosion, which caused the deaths of 95 persons and injuries more or less serious to 14 others. Notwithstanding this fact, however, the experience of coal-mining in New South Wales compares favourably with that of other coal-producing countries.

The average annual number of fatalities in the coal and shale mines of various countries for the last available ten years will be seen from the following table :—

Country.	Average Annual Number of—		Mortality per 1,000 Employed.
	Persons Employed.	Lives Lost.	
United Kingdom ... ..	821,644	1,063	1.29
United States ... ..	359,355	941	2.62
Prussia ... ..	378,963	870	4.86
France ... ..	159,072	185	1.16
Austria ... ..	112,647	187	1.66
Belgium ... ..	124,238	147	1.19
British Columbia ... ..	2,933	9	3.00
Nova Scotia... ..	5,529	21	3.78
New South Wales ... ..	13,305	27	2.01

#### MINERS' ACCIDENT RELIEF FUND.

The New South Wales Miners' Accident Relief Act, which came into force on the 1st January, 1901, applies to all mines in or about which fifteen or more persons are employed. A sum of 4½d. per week is deducted from the wages of each employee and paid by the manager of the mine to the treasurer of a committee for the mine. The committee for a mine consists of (1) an Inspector of Mines appointed by the Minister, (2) three persons appointed by the employees, and (3) two persons appointed by the owner or manager, if he thinks fit. The committee receives and considers all applications for relief in cases of accident, and votes such allowances as appear warranted under the provisions of the Act. The Fund is administered by a Board consisting of six members, one of whom is the chairman, and the others representative of (1) owners of coal and shale mines, (2) owners of other mines, (3) persons employed in or about coal and shale mines, (4) persons employed in or about other mines, and (5) the Department of Mines. Payments into the Fund consist of (1) the balances of deductions from wages unexpended by the committees in payment of allowances, (2) a quarterly contribution by the owner or owners of each mine equal to 50 per cent. of the aggregate amount deducted from the wages at such mine, and (3) a subsidy from the Consolidated Revenue Fund equal to the amount contributed by owners of mines. The Board makes advances to committees in cases where the sums deducted from wages are inadequate to meet allowances payable.

The benefits provided by the Act were increased in 1905 after an actuarial valuation of the Fund, and those now payable are :—

(I) In cases of fatal accident—(1) Funeral allowance, £12; (2) a weekly allowance of 10s. to the widow or other adult dependent upon the deceased for support; and (3) a weekly allowance of 3s. in respect of each child of the deceased or of each child of an adult dependent, payable until such child attains the age of 14 years.

(II) In cases of disablement—(1) A weekly allowance of 15s. until able to resume work; and (2) where disablement is permanent, a weekly allowance of 3s. in respect of each child under the age of 14 years.

For the eight years during which the Act has been in operation, the average annual number of employees contributing has been 23,941, the

amount contributed being £186,744. During the same period the mine owners have paid £88,836, and Government subsidy to the extent of £88,836, and interest amounting to £27,835, have been received; the sum of £161,413 has been disbursed in allowances. Accumulated funds, amounting to £220,000, have been invested in New South Wales Funded Stock.

At the end of 1908, the "permanent" beneficiaries numbered 876, of whom 678 were drawing allowances in respect of fatal accidents, and 198 as the result of permanent disablement; 261 persons were drawing an allowance of 10s. weekly, and 92 permanently disabled workmen were each receiving 15s. weekly. The balance was made up of 523 children, to whom a weekly allowance of 3s. was made, 417 of them being beneficiaries in respect of fatal accidents.

#### PRODUCTION OF COAL.

The following table shows the quantity and value of coal raised in New South Wales from the earliest record to the close of 1907, the total production being 138,678,149 tons, valued at £53,279,162.

Period.	Quantity.	Average per ton.	Value.
	tons.	s. d.	£
Prior to 1880	20,697,747	10 8	11,036,723
1880-4	10,615,625	8 10	4,672,569
1885-9	15,490,611	9 2	7,077,864
1890-4	17,830,177	7 8	6,811,568
1895-9	21,334,976	5 8	6,048,281
1900-4	29,792,589	7 0	10,369,050
1905	6,632,138	6 1	2,003,461
1906	7,626,362	6 2	2,337,227
1907	8,657,924	6 9	2,922,419
Total	138,678,149	7 8	53,279,162

From 1883 to 1898, there was a general decline in the price obtained per ton, but in this respect coal has not differed greatly from other products. In the earlier years, however, the fluctuations in prices to a large extent arose from uncertainty in the markets. This uncertainty no longer exists, for the local markets and those of the other States of Australia and New Zealand demand a large share of the coal raised. The proportion of the production taken by Australasia increases every year, and operates in the direction of steadying the price by removing the principal cause of fluctuation.

New South Wales was its own chief customer during 1907, when, out of the total production stated above, the local consumption amounted to 2,914,417 tons, or 33·7 per cent. Victoria was the principal outside customer, taking (including bunker coal) 1,024,056 tons, or 17·8 per cent. of the total export of 5,743,507 tons. The quantity of coal required for local consumption shows a satisfactory increase during most years, as will be seen from the following statement:—

Year.	Tons.	Year.	Tons.
1896	1,434,610	1902	2,680,552
1897	1,686,968	1903	2,638,652
1898	1,914,455	1904	2,846,942
1899	1,798,505	1905	2,914,085
1900	2,138,165	1906	2,664,822
1901	2,497,441	1907	2,914,417

The annual local consumption per head increased from 16 cwt. in 1877 to over 39·4 cwt. in 1904 and 1905. The larger use of steam for railway locomotives, for manufacturing, smelting, and other purposes, also the multiplication of gas-works, caused a great portion of the increase; but there is a large and growing demand for bunker coal for ocean-going steamers, which up to the end of 1905 appears not as an export, but as required for home consumption. The figures given above for 1907 for local consumption are exclusive of bunker coal, and are equivalent to 37·5 cwt. per head of population; on the same basis as for previous years the annual consumption per inhabitant would be 53·9 cwt. The amount of coal taken by steamers during 1907 was 1,277,935 tons.

The quantity of coal supplied to customers abroad has also largely increased during this period, as shown in the table below.

Up to the end of 1905, no record was kept of the quantity of bunker coal taken by the various steamers, and the amount was included with that used for home consumption. During 1907, no less than 1,277,935 tons were exported as bunker coal, but in order that the details given in the following table may be compared with the previous years, only the coal taken away as cargo has been included in the returns:—

Country or Port.	1903.	1904.	1905.	1906.	1907.
	tons.	tons.	tons.	tons.	tons.
Victoria ... ..	997,912	848,637	922,906	916,971	966,018
Queensland ... ..	51,443	30,735	41,050	53,587	67,972
South Australia ... ..	434,773	486,316	525,317	478,485	548,764
Western Australia ... ..	179,924	177,260	185,250	169,853	147,497
Tasmania ... ..	96,951	90,343	103,301	100,525	90,814
Total, Interstate ...	1,761,003	1,633,291	1,777,824	1,719,421	1,821,065
New Zealand ... ..	270,470	247,254	292,831	215,503	221,094
Fiji ... ..	50,939	52,144	54,591	19,519	33,114
Straits Settlements ... ..	66,756	30,810	82,836	215,762	142,795
India ... ..	49,979	53,839	72,646	46,042	52,835
Hong Kong ... ..	39,680	17,345	94,762	70,668	63,623
Mauritius ... ..	9,394	24,407	12,197	12,237	1,001
South Africa ... ..	24,806	13,417	14,005	4,150	1,800
Canada ... ..	2,053	13,600	12,762	.....	1,014
United Kingdom ... ..	1,018	11,619	23,348	.....	.....
New Guinea ... ..	2,001	6,997	2,610	1,190	.....
Other British Possessions ...	7,758	1,757	1,450	977	13,452
Total, British Possessions ...	524,854	473,189	664,038	586,048	530,728
Chili ... ..	499,778	457,128	462,975	601,044	878,012
United States ... ..	303,790	155,428	100,705	83,511	539,876
Philippine Islands ... ..	228,562	205,588	271,693	312,996	314,235
Hawaiian Islands ... ..	172,130	66,121	119,245	90,635	98,530
Peru ... ..	49,492	45,485	92,124	109,278	101,131
Java ... ..	53,709	30,331	47,350	66,342	37,784
Mexico ... ..	32,048	26,266	46,523	74,737	50,312
Panama ... ..	24,331	10,292	11,019	11,906	6,402
New Caledonia ... ..	18,807	19,501	18,192	12,294	12,816
South Sea Islands ... ..	13,041	11,382	10,341	5,893	4,172
Ecuador ... ..	11,485	13,833	14,257	15,484	7,519
China ... ..	11,715	10,699	39,492	71,794	41,058
Other Foreign Countries ...	11,449	14,333	42,270	15,419	21,932
Total, Foreign Countries ...	1,430,337	1,066,387	1,276,191	1,471,333	2,113,779
Grand Total ...	3,716,194	3,172,867	3,718,053	3,776,802	4,465,572

In the following statement are the results of a number of proximate analyses made by the Government Geologist of coals from the various districts of New South Wales :—

Districts.	Composition.				
	Hygroscopic Moisture.	Volatile Hydrocarbons.	Fixed Carbon.	Ash.	Sulphur.
	per cent.	per cent.	per cent.	per cent.	per cent.
Northern ... ..	1·93	35·13	54·14	8·80	0·54
Southern ... ..	0·97	23·10	65·26	10·67	0·46
Western ... ..	1·87	31·49	52·61	14·03	0·63
Average ... ..	1·74	32·43	56·07	9·76	0·53

Similar analyses of English coal are shown in the following table :—

Description of Coals.	Composition.				
	Moisture.	Volatile matter.	Fixed Carbon.	Ash.	Sulphur
	per cent.	per cent.	per cent.	per cent.	per cent.
Anthracite ... ..	1·50	6·25	81·75	10·50	1·25
Bituminous ... ..	2·50	39·00	50·00	8·50	2·00
Semi-bituminous ... ..	2·00	18·25	71·25	8·50	1·75
Average Bituminous Coals ... ..	2·25	28·63	60·62	8·50	1·88

Excluding the Welsh anthracite—by far the best coal known for steaming purposes—the above analyses show that the New South Wales product, especially that obtained from the Southern and Northern mines, compare favourably as a heat producer with the average bituminous coals. In addition, it has the advantage of a greater specific gravity, while containing less sulphur. The mean specific gravity of the Northern district coals was 1·338, and of the Southern and Western coals 1·339, while the mean of a number of samples of British coals was 1·279. The gas-producing qualities of New South Wales coal, especially that obtained from the Northern mines, are superior to those of English coal, but the latter has a slightly smaller percentage of ash. Illawarra coal is chiefly used by the naval authorities on the Australian station and on the large ocean-going steamers, mainly on account of its cheapness, for the steam-producing power of the coal from the Northern districts of the State is almost equal to that of the Southern article.

## COKE.

The quantities of coke manufactured in New South Wales during the last ten years were as follow :—

Year.	Quantity.			Total value.
	Northern District.	Southern and Western Districts.	Total.	
	tons.	tons.	tons.	£
1898	34,422	47,800	82,222	64,135
1899	43,912	52,618	96,530	77,130
1900	49,374	76,839	126,213	109,620
1901	35,939	92,943	128,882	105,665
1902	24,219	102,653	126,872	89,605
1903	34,730	125,862	160,592	108,764
1904	31,825	139,181	171,006	110,692
1905	25,329	137,632	162,961	100,306
1906	55,991	130,069	186,060	110,607
1907	31,453	223,156	254,609	159,316

Owing to the difficulty of obtaining regular supplies of coke, consequent on the abnormal condition of the freight market, the Broken Hill Proprietary Company erected coke works at Bellambi, on the South Coast Railway line. The ovens supply a large proportion of the company's total requirements, and they are so arranged that duplication can be carried out at any time when it may be considered desirable. The Mount Lyell Copper Mining Company have also erected coke works. It would seem that coke of local manufacture has at last overcome the strong prejudice that existed, judging from the great increase in the production in the Illawarra district during the last decade. This is doubtless due to the greater care exercised in its manufacture, and to the employment of a better class of kiln and appliances for cleaning the coal.

At the old Bulli mine a coal seam 6 feet thick has been for about half that thickness transformed into a sort of natural coke, apparently through the intrusion of igneous matter underneath the seam.

Considerable activity is now being displayed in the Illawarra district, where there are eight works all fully employed, and when the good qualities of the locally manufactured coke are recognised, the district will doubtless become not only a smelting, but also a manufacturing centre.

## KEROSENE SHALE.

This mineral is found in various parts of New South Wales, but principally at Hartley, Katoomba, Megalong, Bathgate, near Wallerawang, Joadja Creek, Berrima, Mount Kembla, Burragorang, and Greta, and also at Colley Creek, near Murrurundi, in the Capertee district, and in the valley of the Wolgan River. The shale occurs in seams, or lenticular patches of greater or less extent, the largest hitherto discovered not exceeding 1 mile in length, and varying in thickness from a few inches to 6 feet. It is a species of torbanite or cannel-coal, similar to the boghead mineral of Scotland, but yielding a much larger percentage of volatile hydrocarbon than the Scotch mineral. The richest shale at the Joadja mine, near Mittagong, yields about 130 gallons of crude oil per ton, or 15,400 cubic feet of gas, with an illuminating power equal to forty-eight sperm candles when gas only is extracted from the shale, and has a specific gravity of 1.098, while the best shale from Hartley Vale yields from 150 to 160 gallons of crude oil, or 18,000 cubic feet of gas of forty candle power per ton. The specific gravity of the best specimens

of Joadja Creek and Hartley shale is 1·06, the amount of sulphur 0·49 per cent., and the yield of tar 40 gallons per ton. It is found advantageous for mixing with ordinary coal for the manufacture of gas, and is largely exported to Great Britain, America, and other foreign countries, as well as to the neighbouring States. On analysis the following result was obtained from average specimens:—

Volatile Hydrocarbons, including moisture ...	...	...	82·50 per cent.
Fixed Carbon ...	...	...	6·50 „
Ash ...	...	...	11·00 „

The industry is at present confined to the mines controlled by the Commonwealth Oil Corporation (Ltd.), at Hartley Vale, New Hartley, and Wolgan. This company not only raises shale for export, but also manufactures from it petroleum oil and other products. The production of kerosene shale from the opening of the mines in 1865 to end of 1907 amounts to 1,326,998 tons, of the value of £2,167,500, as shown in the following table:—

Period.	Quantity.	Average price per ton.	Total value.	Period.	Quantity.	Average price per ton.	Total value.
	tons.	£ s. d.	£		tons.	£ s. d.	£
1865-84	370,217	2 4 9	828,194	1905	38,226	0 11 1	21,247
1885-89	186,465	2 3 7	406,255	1906	32,446	0 17 7	28,470
1890-94	247,387	1 16 6	451,343	1907	47,331	0 13 7	32,055
1895-99	191,763	1 3 3	222,690				
1900-04	213,163	0 16 8	177,246	Total .....	1,326,998	1 12 8	2,167,500

The features of this table are the steady fall in the average price of the mineral and the fluctuating production. There is no special reason for the rise and fall in the quantity of shale produced beyond the irregularity in the orders coming forward for export, and the slackening of mining operations while the mineral at grass is being reduced. Since 1902 the Genowlan and Joadja mines have been closed.

At the shale mines in 1907 there were 188 men employed under ground and 88 above ground, or a total of 276.

#### DIAMONDS AND OTHER GEM-STONES.

The existence of diamonds and other gem-stones in the territory of New South Wales was recorded as early as 1851. The diamonds occur in old tertiary river drifts, and in the more recent drifts derived from them. The deposits, which occur in the Inverell, Bingara, Mittagong, Cudgegong, and Narrabri districts, are extensive, and have not yet been thoroughly prospected. The finest of the New South Wales diamonds are harder and much whiter than the South African diamonds, and are classified as on a par with the best Brazilian gems. The largest diamond secured in this State was found during 1905 at Werong, 30 miles from Oberon, and weighed  $28\frac{1}{8}$  carats. There is great difficulty in obtaining exact statistics of the production of diamonds in New South Wales, and this difficulty will continue to be experienced until the industry becomes well established, which at present cannot be said to be the case. The

following table, compiled from such information as is available, can only be regarded as an approximation, and is believed to considerably understate the actual output. The majority of the diamonds have been obtained from the mines in the Bingara and Copeton (Tingha) districts:—

Period.	Carats.	Value.
	No.	£
1867-1885*	2,856	2,952
1886-1890	8,120 $\frac{1}{2}$	6,390
1891-1895	19,742 $\frac{3}{4}$	18,245
1896-1900	69,384 $\frac{1}{2}$	27,948
1901-1905	54,206	46,434
1906	2,827	2,120
1907	2,539	2,056
Total ...	159,675 $\frac{3}{4}$	106,145

\* Estimated.

Other gem-stones, including the sapphire, emerald, oriental emerald, ruby, garnet, chrysolite, topaz, zircon, &c., have been found in the gold and tin-bearing drifts and river gravels in numerous localities throughout the State. Precious stones, such as amethyst, cairngorm, and onyx, with other varieties of agate, are not uncommon. No gems have been produced during recent years.

Topazes are obtained largely at Oban, in the Glen Innes division, but the price obtained is very low.

Turquoises have been discovered at Mount Lorigan, near Wagonga, and work was carried on during the year 1895 by means of aid granted from the Prospecting Vote. In 1896, however, the mine was closed down.

#### OPAL.

The finest opal known is obtained in the upper cretaceous formation at White Cliffs, near Wilcannia. It is difficult to state with exactitude the value of the production; but the following table shows the estimated value of the production to the end of 1907:—

Year.	Value.	Year.	Value.
	£		£
1890	15,600	1900	80,000
1891	.....	1901	120,000
1892	2,000	1902	140,000
1893	12,315	1903	100,000
1894	5,684	1904	57,000
1895	6,000	1905	59,000
1896	45,000	1906	56,500
1897	75,000	1907	79,000
1898	80,000		
1899	135,000	Total ...	1,068,099

The foregoing figures are approximate only, as it is impossible to arrive at the total production with any degree of certainty; but they are, if anything, understated. The quality of the stone found on the fields varies considerably, some only realizing 10s. per oz., whilst the best quality occasionally realises as much as £70 per oz. in the rough, but prices ranging from £5 to £20 per oz. are of frequent occurrence. The best market for the gems is Germany, where they find a ready sale; but it is stated that the principal gem merchants of Europe have now agents on the fields for the purchase of the stone.

In 1896, opal was discovered at Purnanga, about 40 miles north-east of White Cliffs, but the scarcity of water has retarded development. Some very fine parcels of stone have been raised in this locality, and it is considered that Purnanga is the nucleus of a fine opal field should a good water supply become available. A new field near the Queensland border, and known as Wallangulla, provided steady employment during 1907 for 125 miners, who obtained opal valued at about £13,000. The increase in value is largely attributable to the discovery of a quantity of dark opal. There is now a settled population on the field, and a considerable expansion of operations is expected.

#### OTHER MINERALS.

Mica is known to exist in many parts of New South Wales, but has never yet been worked, although there is a considerable demand for the article, especially if in blocks of fairly large size that could be split easily into thin plates. It is to be met with in the numerous granitic areas that occur in various parts of the State, especially in the coarsely-crystalline granitic formations in the Silvertown district, and elsewhere in the Barrier Ranges.

Asbestos has been found in veins in serpentine in the Gundagai, Rockley, and Barrier Range districts—in the last-named in considerable quantities.

Alunite occurs as a large deposit at Bulladelah, about 35 miles from Port Stephens, the yield averaging about 80 per cent. of alum. During 1907, 2,088 tons of alunite, valued at £5,115, as compared with 1,856 tons, valued at £4,637, in 1906, and 2,702 tons, valued at £6,750, during 1905, were shipped to England, where it was found that the stone can be treated more cheaply than is possible locally. The value of alunite, the product of this State, exported to the end of 1907 is set down at £87,712.

#### MARBLE, BUILDING STONES, FIRE-CLAYS, AND SLATES.

New South Wales possesses an abundant supply of various kinds of stone and other materials for the building and adornment of its cities. Marble limestone is found in great masses near Wallerawang, Bathurst, Molong, Marulan, Tamworth, and Kempsey, localities which are all within convenient distance of the great arteries of communication. Marble quarries have been opened in the Cow Flat, Marulan, Wallerawang, Orange, and Tamworth districts; but as the total value of the marble raised to the end of 1907 amounted only to £14,080 at point of production, it cannot be said that the deposits are receiving pronounced attention, or that much effort has yet been made to supply the local demand.

The cost of quarrying and the carriage to Sydney are, of course, heavy; but the local marble compares favourably, both in form and colouring, with the imported article, and should for this reason be more extensively used. During 1907 the marble was obtained principally from quarries at Cooloola, in the Rockley division, and from Borenore, in the Orange division.

Granite is found at Bathurst, Moruya, Trial Bay, and on Montagu Island, as well as at many other places throughout the State. Most of the granite hitherto used in Sydney has been obtained from Moruya, a port about 180 miles south of Sydney.

Limestone flux was supplied formerly to the Broken Hill silver-mines from quarries at Tarrawingee, about 30 miles distant. When the Broken Hill Proprietary Company transferred the whole of their smelting operations to Port Pirie in April, 1898, the demand for flux ceased, and the quarries thereupon closed down. From 1900 to 1904 considerable activity was displayed in the mining of limestone at Portland,

in the Mudgee district, in connection with the Lime and Cement Works, and also in the Rockley division, and at Marulan, Broken Hill, Bulladelah, Taree, Barraba, Parkes, and Peak Hill, where lime has been produced and a quantity of limestone obtained for flux.

The output during the last three years has been well maintained, the quantities raised being used for the manufacture of Portland cement and lime, or utilised by the smelting companies as flux. The following table shows the quantity raised for flux since 1902, together with the value of cement manufactured :—

Year.	Limestone raised for flux.		Value of Cement manufactured.
	Quantity.	Value at Smelting Works.	
	tons.	£	£
1902	17,352	10,615	46,500
1903	23,824	14,221	55,740
1904	24,975	14,434	54,750
1905	14,941	9,519	88,100
1906	12,788	7,463	128,487
1907	41,667	16,162	144,548

The Hawkesbury formation, over which the city of Sydney is built, provides the city with an inexhaustible supply of sandstone, of the highest quality for building purposes. This material is admirably adapted for architectural effect, being of a pleasing colour, fine grain, and very easily worked. The beauty of Sydney street architecture is due in a considerable degree to the free use of this excellent sandstone.

Basalt, or "blue metal," which is much in demand for road metal and for the ballasting of the railway lines, is obtained at Kiama, Prospect, and Pennant Hills. This stone has not yet been used to any extent for building purposes.

Syenite, commonly called trachyte, is found at Bowral; as a building material it is equal to granite in solidity, and takes a beautiful polish. The success which has attended its use as a building stone, together with the short distance from the metropolis at which it is to be found, will no doubt cause it to be regarded favourably in the future for large structures.

Kaolin has been found in many granitic districts, such as Bathurst, Gulgong, Uralla, and Tichbourne, near Parkes. The clay is of excellent quality, and superior to the best obtained in England or France.

The Coal Measures also contain numerous beds of fire-clays; and in every part of the State excellent clays, well adapted for brick-making purposes, are extensively worked. Slates are found in several districts, but are principally quarried at Gundagai, as well as at Bathurst and Goulburn. The State has no need to import building material of any description, as it possesses a supply amply sufficient to provide for all its own wants.

Graphite occurs in the Walcha division, and also at Undercliff, in the New England district, where there are several lodes, one of which is 6 feet wide, but it is of inferior quality. The only mining for plumbago carried on is at the Undercliff mine, where recently a company has entered upon operations with the intention of manufacturing lubricants, crucibles, paints, &c.

## PROSPECTING VOTE.

The Legislature has for some years past provided a sum annually to encourage prospecting for gold, and in 1889 the conditions of the vote were so amended as to embrace all minerals. The amount set apart each year was originally £20,000. For the year 1892, however, it was fixed at twice that sum; and during each of the subsequent years up to 1901-2 the sum of £25,000 was available. For the year 1902-3 the amount voted was reduced to £20,000, and this was further decreased to £15,000 for each of the following years. During the last few years, with the exception of the Cobar district, where operations were most active, prospecting has not been so vigorously followed as previously. This is explained by the demand for competent miners at the established mines, and by the steady employment offering in connection with the agricultural and pastoral industries.

It cannot be claimed that the discovery of a large payable field has so far been made by means of the Prospecting Vote; but at the same time it may be said that some rich mines have been opened up with the aid granted, notably the Mount Boppy mine, which is now the premier gold mine of the State, having produced gold to the value of £589,649 during the last seven years. The Queen Bee copper mine owes its present successful position to the aid granted, and the Crowl Creek mine at Shuttleton was opened up indirectly as the results of assistance from the same source. In addition to the employment of labour, the proving of a lode or reef invariably leads to the development of large areas of adjoining land under the Mining Act, from which increased revenue is derived by the State. From the year 1888 to the end of December, 1907, the amount expended in prospecting work was £382,387.

Miners desiring a grant from the vote have to satisfy the Prospecting Board that the locality proposed to be prospected is likely to yield the mineral sought, and that the mode of operation is suitable for its discovery. Aid is given in deserving cases up to 50 per cent. of the value of the developmental work done, inclusive of the necessary implements and materials. The granting of assistance for sinking from the surface is not favoured, and applicants are generally required to prove their *bona-fides* by carrying out a certain amount of work unassisted. Miners who have been assisted from the vote are not entitled to claim any reward that may be offered for the discovery of any new gold or mineral field.

A clause in the Prospecting Regulations provides that the amount advanced from the vote shall be refunded in the event of the discovery of payable mineral by means of the aid granted.

## AREA UNDER MINING OCCUPATION.

At the close of the year 1907, the area of Crown lands held under lease to mine for gold was 13,219 acres, and for other minerals 146,847 acres. These figures include 7,440 acres and 3,650 acres respectively, being the areas held under special lease for gold and tin dredging. There were also 1,689 acres leased for purposes of water conservation, making a total of 161,755 acres of Crown lands held under mining lease. Under application to lease, the area of auriferous Crown lands held was 1,554 acres, and of lands upon which other minerals were being sought, 38,225 acres, while 5,524 acres were under application for dredging purposes, in addition to 1,156 acres required as sites for races, dams, and machinery, giving a total of 46,459 acres of Crown lands held under application to lease. It is impossible to state definitely the area actually held under mining occupation in this State, as it is not compulsory in some instances for the holders of areas held under certain regulations to register the

same. In addition to the areas shown above to be held under lease, or application to lease, it is estimated that a further area of 48,703 acres of Crown lands, exclusive of reserved lands, was occupied under Mining Regulations, &c., making a total of 256,917 acres of Crown lands occupied for mining purposes.

At the same date, the area of private lands held under lease was 8,808 acres; of which 4,667 acres were held under gold lease, 2,912 acres under mineral lease, and 1,229 acres were being mined for gold in conjunction with other minerals. There were also 341 acres leased for water conservation and machinery sites, making a total of 9,149 acres of private lands under lease for mining purposes, while 1,883 acres were held under application to lease. On the same date, permits to mine for gold on 59 acres of reserved lands were in existence, while the area of reserved lands held under authority to mine for other minerals was 54,917 acres, of which 21,469 acres were under application. In addition there were 36,333 acres held under agreement with owners, and 15,196 acres under authority to enter private lands, making a total of 117,537 acres of private or reserved lands held under some form of tenure for mining purposes.

From the foregoing it appears that the area held under mining occupation on 31st December, 1907, was approximately 374,454 acres, this area including 109 acres held in terms of the Church and School Lands Mining Act of 1889.

The number of miners' rights issued during 1907 was 23,953, and the revenue derived therefrom amounted to £3,971. During the same period, 1,902 business licenses were granted, the fees received being £1,266. Mineral licenses were abolished by the Mining Act, 1906, but up to the 15th July, when the Act came into operation, 581 mineral licenses had been issued, for which fees to the amount of £101 were paid.

#### MINING ACT, 1906.

The Mining Act, 1906, consolidated and amended the then existing Acts, thirteen in number, relating to mining on Crown and private lands. The Mining Board Regulations, and the various sets of regulations made under the repealed Acts, have been superseded by one compact set of regulations under the new Act. They practically constitute the law relating to holdings under miners' rights, besides prescribing conditions relating to mining leases; in each case the existing provisions are simplified and liberalised. The principal provisions of the Act may be summarised briefly as follows:—

##### *Miners' Rights and Business Licenses.*

A miner's right or a business license is issued for any period from six months up to twenty years, the fees payable being determined according to the currency of the right or license. In the case of a miner's right, the fee is 2s. 6d. for six months, or 5s. per annum, and on the issue of same the fee payable is calculated on the basis of 5s. for each year (or 2s. 6d. for each half-year) of the term. Similarly with a business license, the fee for which is £1 for each year or 10s. for each half-year.

The miner's right entitles the holder to occupy Crown land for the purpose of mining therein for gold or minerals; for the purpose of constructing works, conserving water, or obtaining timber in connection with mining; and also for residence.

A business license entitles the holder to occupy  $\frac{1}{4}$  acre of Crown land in a town or 1 acre outside town boundaries, for the purpose of carrying on business and for residence.

The regulations prescribe the areas which may be held as prospecting areas or claims, and the labour conditions attached to the same. Areas are also prescribed for dam or machinery sites, &c., and provision is made for registration and survey in certain instances, transfer, creation of shares, and all other matters affecting holdings under miner's right or business license.

Special provision is made by section 17 of the Act for the issue to any holder of a miner's right of an authority to prospect upon extended areas of Crown land, whether exempted from ordinary occupation under miner's right or not. Such authority is subject to payment of a small rent, and upon finding gold or minerals the holder may be required to take out a lease.

#### *Leases of Crown Lands.*

The term "Crown Lands" has a much wider interpretation under the existing Act than was the case under the repealed Acts and now embraces all lands vested in His Majesty or in any trustee or constructing authority for public purposes; all lands held under lease from the Crown (except conditional lease or conditional purchase lease) and any road, street, or highway.

Leases of Crown lands are divided into two classes, viz.:—(a) Mining leases, and (b) leases for "mining purposes."

Mining leases are either for gold or minerals, the annual rent in each case being 5s. per acre, except in the case of leases for coal or shale, which are subject to a rental of 1s. per acre, and a royalty of 6d. per ton on all shale or large coal, and 3d. per ton on all small coal raised. The amount paid as rent may be deducted from the royalty.

Gold-mining leases are limited to 25 acres, mineral (other than coal, shale, or opal) leases to 80 acres, coal or shale leases to 640 acres, and opal leases to 10 acres, and the maximum term for which a lease can be granted is 20 years, with the right of renewal for a similar term.

Under special conditions, where there are exceptional difficulties in mining the land, leases for larger areas may be granted, subject to report by the Prospecting Board. Such special leases are subject to payment of a rent or royalty to be fixed by the Minister in each case.

The definition of "mining purposes" covers all operations in connection with mining, such as erecting buildings or machinery, conserving water, treatment of tailings, or any other purpose in connection with mining for gold or minerals. These "mining purpose" leases are limited to the surface and the land to a specified depth, and do not authorise the holder to mine for any minerals contained in the land.

#### *Mining on Private Lands.*

The holder of a miner's right may obtain from the Warden an authority to enter upon any private land to prospect for gold, or upon land granted with the reservation of minerals to the Crown, to prospect for minerals other than coal or shale. The fee for such authority is 5s., and the holder must pay to the owner of the land such rent and compensation for surface damage as the Warden, after inquiry, may assess. Having obtained his authority to enter, the holder may search for the specified mineral on the area granted (not more than 25 acres for gold or 80 acres for minerals) and may apply for a lease of the land, or any part thereof. Such lease may be for any term not exceeding 20 years, with the right of renewal for a like term. The rent to the owner of the land is £1 per acre payable in respect only of such part of the surface as is applied for and granted. A royalty of 1 per cent. on the gross value of the gold and minerals won is payable to the Crown. The owner of private land or the occupier with the owner's consent, may

obtain an authority to enter or lease of any area not exceeding that prescribed for an ordinary lease to mine for gold or any minerals, without any payment of rent or compensation, and such owner or occupier may also obtain a lease of any area not exceeding 640 acres to mine for coal or shale. Such owners' leases are subject to the payment to the Crown of 1 per cent. royalty on gold or minerals, and 6d. per ton of large coal or shale, and 3d. per ton of small coal.

The owner of any private land may enter into an agreement with the holder of a miner's right, giving him permission to mine for gold or minerals (if reserved to the Crown) on any area not exceeding that prescribed for an ordinary lease. Such agreement must be submitted for the Minister's concurrence, and is subject to the payment of 1 per cent. royalty to the Crown on all gold or minerals won. All agreements must be registered.

All lessees or holders of agreements may deduct rent paid from the amount of royalty payable.

Under special conditions, where there are exceptional difficulties in mining the land, leases for extended areas may be granted, subject to report by the Prospecting Board.

#### *Dredging.*

Leases of Crown or private land may be granted for the purpose of mining for gold or any mineral by dredging, sluicing, or other method. Such leases may be for any area not exceeding 100 acres and for any term not exceeding 20 years, with the right of renewal for a similar term. The lessee is required to employ a certain number of men, and to expend a certain sum in the purchase and erection of machinery and appliances. The rent of Crown land is 2s. 6d. per acre, and of private land such amount as may be assessed by the Warden. Compensation for surface damage to private land may also be assessed by the Warden. Rent paid may be deducted from the royalty payable.

#### *Leases generally.*

The labour conditions fixed by Regulation are as follows:—

For gold: 1 man to 5 acres for the first year, and thereafter 1 man to 2 acres.

For minerals other than gold, coal, or shale: 1 man to 20 acres for the first year, and thereafter 1 man to 10 acres.

For coal or shale: 2 men to 320 acres.

The Act empowers the Warden to grant suspension of the labour conditions on any lease if the mine is unworkable, or if the lessee is physically or temporarily financially, unable to work the mine.

He may also recommend to the Minister, and the latter may grant, suspension if the price of the metal mined for is low, or if other adverse conditions exist. Suspension may be granted for any period not exceeding six months. If a lessee has employed labour in excess of that required by the terms of his lease, he may obtain exemption from labour conditions to the extent of one month in respect of each six months during which excess labour has been employed.

#### MINERAL PRODUCTION, 1908.

Just as this issue is going to press, particulars showing the mineral production of the State during 1908 have been issued by the Department of Mines. The figures show that there has been a considerable decrease in the output as compared with that of the previous year. This was due primarily to the large drop in the prices of the various industrial metals which set in during the latter portion of 1907, and continued throughout the past year, necessitating the temporary shutting-down of a number of the smaller mines, and reduced production by the larger ones.

The following table shows the value of the mineral products during 1908, and the increase or decrease in the output as compared with the production during the previous year:—

Mineral.	Value of Output, 1908.	Increase.	Decrease.
	£	£	£
Gold ... ..	954,854	.....	95,876
Coal ... ..	3,353,093	430,674	.....
Silver and silver lead ... ..	2,160,195	.....	1,755,751
Copper, matte, and ore ... ..	502,812	.....	224,962
Tin and ore ... ..	205,447	.....	87,858
Kerosene shale ... ..	26,067	.....	5,988
Zinc (spelter and concentrates) ... ..	600,883	64,263	.....
Coke .. ...	199,933	40,617	.....
Noble opal ... ..	41,800	.....	37,200
Lead (pig, &c.) ... ..	186,746	.....	187,436
Limestone flux ... ..	14,779	.....	1,383
Antimony and ore ... ..	1,141	.....	45,137
Bismuth ... ..	2,017	.....	3,251
Diamonds ... ..	1,358	.....	698
Chrome iron ore ... ..	.....	.....	105
Alunite ... ..	2,705	.....	2,410
Ironstone flux ... ..	6,199	.....	1,508
Pig-iron ... ..	98,777	38,227	.....
Wolfram ... ..	6,742	.....	19,493
Scheelite ... ..	11,082	.....	12,699
Molybdenite ... ..	929	.....	2,635
Platinum ... ..	439	.....	575
Iron-oxide ... ..	1,857	.....	104
Sundry minerals ... ..	4,294	147	.....
Total ... ..	8,384,149	573,928	2,485,069
Net decrease		...	£1,911,141

For reasons given previously, scrap-iron, lime, and cement to the value of £225,457 are not included in the foregoing figures.

Notwithstanding the very depressing effect which the general fall in prices has exercised on most branches of the industry, it is satisfactory to note that the total value of the production during 1908 exceeded that of any previous year except 1907. The production of coal, which amounted to 9,147,025 tons, valued at £3,353,093, has established a fresh record, exceeding the output during 1907 by 489,101 tons, and £430,674 in value. The silver and silver-lead industry exhibits a decrease of £1,878,924, but in this connection it should be noted that steady progress has been made in the extraction of the metallic contents of the tailings on the Broken Hill field, the processes in use having given most satisfactory results.

The low price of copper was responsible for a decrease of £224,962 during the year and in the case of several mines which are remote from railway lines work had to be suspended owing to the heavy cost of transport.

The decrease in the output of tin amounted to £87,858, due both to the fall in price, and to the smaller yield from the dredges.

The quantity of gold obtained from the alluvial workings was below the average, the rainfall generally being insufficient for sluicing purposes, and very little "fossicking" was undertaken.

The number of persons employed in or about the mines during 1908 was 38,965, of which 20,881 were engaged in metalliferous mines and 18,084 in coal and shale mines. The figures disclose an increase of 728 miners in connection with the coal and shale mines, but in all other departments there have been decreases as follows:—Silver, lead, and zinc, 2,461; gold (principally quartz-mining), 1,105; copper, 1,019; and tin, 717.

## THE MANUFACTURING INDUSTRY.

COMPARED with the scale on which manufactories are established in the older countries of the world, those of New South Wales appear very small; but this is not surprising when the sparseness of the population throughout a large portion of the State is taken into consideration. Still, although New South Wales cannot yet be considered an important manufacturing country, this source of national wealth has by no means been neglected, for the fixed capital invested now amounts to nearly £16,000,000, and the annual value of production to nearly £13,500,000.

The progress in manufactories and works since the year 1877 may be seen from the following figures:—

Year.	Establishments.	Hands employed.	Year.	Establishments.	Hands employed.
	No.	No.		No.	No.
1877	2,602	24,932	1902	3,396	66,269
1881	2,961	31,191	1903	3,476	65,633
1886	3,541	43,527	1904	3,632	68,036
1891	3,056	50,879	1905	3,700	72,175
1896	2,928	49,840	1906	3,861	77,822
1901	3,367	66,230	1907	4,432	86,467

Prior to 1901 there was no Act in force in the State making it imperative for proprietors of factories and works to supply annual returns of their operations. The Census Act of 1901, however, conferred extensive powers on the Statistician with respect to information regarding these establishments, and, in consequence, the industrial statistics since that year have been on a far more comprehensive basis. At the present time particulars of the operations of factories and works are seldom withheld, and when they are not given, an approximate return is furnished by the collector, who usually possesses a special knowledge of the district.

Establishments where no machinery is used are excluded from consideration unless at least four persons are employed. Prior to 1896 the minimum in such cases was five hands; but a change was made to secure uniformity with Victoria, consequently all information regarding manufactories throughout the Commonwealth is now compiled on the same basis. All works and factories in which machinery is used are included, as it is obvious that an establishment where only two or three hands are employed to look after the machinery may turn out a greater quantity of work than another in which the services of a much larger number of hands, unassisted by mechanical power, are utilised.

The following table shows the progress since 1896, both in regard to hands employed and machinery used :—

Year.	Number of Establishments.	Hands employed.			Power of Engines.		Value of Machinery and Plant.
		Males.	Females.	Total.	Full Capacity.	Average Used.	
					h.-p.	h.-p.	£
1896	2,928	42,908	6,932	49,840	44,839	33,253	5,035,905
1897	2,826	44,333	7,106	51,439	46,347	34,191	5,294,228
1898	2,839	44,673	7,845	52,518	44,241	32,968	5,435,896
1899	2,912	47,063	8,583	55,646	45,938	33,080	5,640,384
1900	3,077	50,516	10,263	60,779	49,599	35,828	5,707,640
1901	3,367	54,556	11,674	66,230	63,405	44,595	5,860,725
1902	3,396	54,326	11,943	66,269	75,907	52,813	6,795,843
1903	3,476	52,453	13,180	65,633	81,475	59,353	7,009,806
1904	3,632	53,457	14,579	68,036	86,878	62,407	7,536,903
1905	3,700	56,111	16,064	72,175	90,896	70,054	7,919,948
1906	3,861	59,979	17,843	77,822	97,244	74,756	8,295,337
1907	4,432	65,953	20,514	86,467	108,257	81,293	9,043,772

During the two years preceding 1893 the manufacturing industry declined; but after the financial crisis in that year there was an almost immediate recovery, and each succeeding year, with one exception, has seen an increase in the number of hands employed. There has, moreover, been a great increase in the power and value of machinery used.

Taking the figures for 1898, it will be seen that during the last ten years there has been an increase of 21,280 males and 12,669 females, making a total of 33,949 hands. The proportionate increase in the number of females has been much greater than in the case of males, for in several years the latter showed a decrease. From 1893 to the end of 1901, the number of males steadily increased; but during the next two years there was a temporary decrease, chiefly in the hands employed in metal works, establishments dealing with pastoral products, and refrigerating works. The increase during 1907 is not really so large as appears, as during that year 178 establishments employing 1,044 persons were included for the first time. These establishments ought to have been included in previous years, but were overlooked by the collectors. The industries affected from this cause were all in the country districts, and principally were devoted to tinsmithing, aerated waters, tailoring, dressmaking, printing, coachbuilding, and saddlery.

#### EMPLOYMENT OF FEMALES.

The great increase in the number of females employed is a striking feature of the table just given, and when viewed as a proportion of the total number of hands, the result is still more marked. Taking the figures for 1896, it is found that the females represented only 13·9 per cent. of the total hands, while in 1901 the proportion had increased to 17·6 per cent., and in 1907 to 23·7 per cent. In order to indicate clearly the extent to which female labour is utilised, and the direction in which it is chiefly

applied, the following table has been prepared, showing the numbers engaged in each of the principal branches of the manufacturing industry during the three years, and the proportion to every hundred males employed:—

Manufactory or Work.	Females employed.			No. of Females to 100 Males.		
	1896.	1901.	1907.	1896.	1901.	1907.
	No.	No.	No.	No.	No.	No.
Biscuits ... ..	136	350	543	44	71	94
Boots and Shoes ... ..	849	1,118	1,623	32	39	51
Clothing (Slop) ... ..	1,290	2,636	4,066	322	434	454
Clothing (Tailoring) ... ..	1,036	1,437	2,207	107	100	121
Clothing (Shirts, &c.) ... ..	56	337	1,341	509	1,021	1,187
Confectionery ... ..	118	225	478	33	39	65
Dressmaking and Millinery ... ..	1,738	2,526	4,421	4,138	4,141	7,895
Hats and Caps ... ..	50	198	759	217	150	227
Jam and Fruit Canning ... ..	81	140	377	22	28	76
Printing and Bookbinding ... ..	394	703	1,032	9	16	20
Paper Bags and Boxes ... ..	134	140	562	343	149	157
Tobacco ... ..	170	428	491	36	71	80
Woollen and Tweed Mills ... ..	70	72	216	43	44	121
Other Industries ... ..	810	1,364	2,398	25	32	47
Total .....	6,932	11,674	20,514	16	21	31

In 1907 there were 13,582 more females employed than in 1896, and the proportion of females to every hundred males employed has risen from 16 to 31. Between 1901 and 1907 the increase in the proportion was quicker relatively than in the years prior to 1901. Although the greater portion of the numerical increase has occurred in those industries which essentially belong to woman's sphere, there has also been a considerable increase in other industries; so that there is evidently an increasing tendency on the part of the manufacturers towards the introduction of female labour for the performance of minor duties in the work of manufacture, and in connection with the sorting, packing, and labelling of finished articles. Amongst the industries enumerated in the previous table, in nearly every instance the number of females employed to 100 males is increasing, noticeably in the biscuit, confectionery, and tobacco factories.

In the clothing industries, which include the manufacture of slop and waterproof clothing, tailoring, shirt and hat making, and dressmaking and millinery, the number of females employed in 1898 was 5,063, and 12,925 in 1907, an increase of 7,862 hands, equal to 151 per cent. In other industries, the numbers in each year were 2,782 and 7,589 respectively, an increase during the period of 4,807, or 173 per cent.

#### CHILD LABOUR.

Child labour is not employed in the factories of the State to any great extent, although it is gradually increasing. The law regulating primary education provides that children must attend school until they reach their fourteenth year, with the exception of those who, prior to reaching that age, have obtained exemption certificates. The Shops and Factories Act of 1896 provides that no child shall, unless by special permission of the Minister, be employed in any factory; and no such special permission shall be given to a child under the age of 13 years. For the purposes of this Act, any person under 14 years of age is considered to be a child; and the children who received permits in 1907 numbered 441, of whom 306 were boys and 135 girls.

Useful information in this connection is collected under the provisions of the Factories and Shops Act, which will tend to show the trend of the movement regarding the employment of child labour. Taking the factories in the metropolitan district, the following are the figures for the last ten years:—

Year.	Factories under Factories and Shops Act.					
	Employees under 16.		Total Hands.		Proportion of Hands under 16.	
	Males.	Females.	Males.	Females.	Males.	Females.
1898	1,062	525	23,786	7,531	per cent. 4·46	per cent. 6·70
1899	1,224	613	25,631	8,604	4·78	7·12
1900	1,342	788	29,086	10,018	4·61	7·87
1901	1,545	965	31,247	11,026	4·94	8·75
1902	1,603	1,277	31,433	12,397	5·10	10·30
1903	1,560	1,352	30,539	13,464	5·11	10·04
1904	1,634	1,572	30,888	14,777	5·29	10·64
1905	1,793	1,499	33,437	15,747	5·36	9·52
1906	2,017	1,891	36,200	17,591	5·57	10·74
1907	2,233	2,082	39,157	19,063	5·70	10·92

From these figures it would appear that while the employment of boys remains relatively about the same, the proportion of girls has steadily increased, and about one-tenth of the females now employed are under 16 years of age.

#### METROPOLITAN AND COUNTRY MANUFACTORIES.

The number of manufactories in the State at the end of 1907 was 4,432, and the number of hands employed 86,467, or an average of nearly 20 per establishment. There were 143 establishments which each employed over 100 persons, the average number therein being 216. In the following table will be found a division of the manufactories in the metropolitan and country districts, according to the number of hands employed during 1907:—

Establishments employing—	Metropolitan District.		Country Districts.		New South Wales.	
	Establishments.	Hands.	Establishments.	Hands.	Establishments.	Hands.
Under 4 hands ... ..	163	383	484	1,124	647	1,607
4 hands ... ..	138	552	370	1,480	508	2,032
5 to 10 hands ... ..	621	4,431	1,015	6,926	1,636	11,357
11 to 20 „ ... ..	445	6,565	358	5,108	803	11,673
21 to 50 „ ... ..	373	11,724	132	4,004	505	15,628
51 to 100 „ ... ..	148	10,328	42	3,018	190	13,346
101 and upwards ... ..	107	23,264	36	7,560	143	30,824
Total ... ..	1,995	57,247	2,437	29,220	4,432	86,467

The chief seat of the manufacturing industry is, of course, to be found where population is densest; consequently the factories of the metropolitan district, although not so numerous, are much more important than those of the country, and provide employment for nearly twice the number of hands. The average number of hands per establishment in the metropolitan district was between 28 and 29, and in the country about 12.

The disparity between the metropolitan and country districts was not always so marked—in 1898 the hands numbered 31,934 and 20,584 respectively—and the inevitable conclusion is that the chief development of the manufacturing industry within recent years has taken place in the metropolis.

The facilities for the establishment of large industries in and around Sydney are considerable—a commanding position as regards communication with the outside world, proximity to the coal-fields, easy communication by rail or sea with the chief seats of raw production in the State, density of population, and abundant water supply—these have tended to centre in the metropolitan district all the chief industries. In the country districts the principal works are saw-mills, smelting works, sugar-mills, and flour-mills, or industries of a domestic character intended to meet a day-to-day demand, or for the treatment of perishable goods.

The following table shows the number of hands employed in the metropolitan district as compared with the remainder of the State for the last ten years:—

Year.	Hands employed.		Year.	Hands employed.	
	Metropolitan District.	Country Districts.		Metropolitan District.	Country Districts.
1898	31,934	20,584	1903	43,752	21,881
1899	34,216	21,430	1904	45,409	22,627
1900	38,668	22,111	1905	48,842	23,333
1901	42,415	23,815	1906	52,605	25,217
1902	43,577	22,692	1907	57,247	29,220

There is a vast field open for the development of manufactures in New South Wales. Producing the raw material of various kinds necessary for supplying the primary wants of civilisation in respect both of food and clothing, possessing immense resources of coal, together with vast deposits of iron and other mineral ores, and with the best shipping facilities, it is evident that the State must eventually become a potent factor in supplying the wants of Australia, if not of the world. The one great cause which has hitherto operated to restrict the development of manufacturing operations is the difficulty of drawing from a population so small and so widely scattered a fair profit on the capital required.

#### CLASSIFICATION OF MANUFACTORIES.

The majority of the manufacturing industries may be classified as domestic industries—that is to say, industries called into existence by the natural resources of the State, or connected with the treatment of perishable products for immediate use; but there is also a considerable number of industries the products from which come into competition with

imported goods. The number of hands engaged in these classes were—in domestic industries dependent on natural resources, 40,645; industries connected with the treatment of perishable products, 4,010; and in other industries, 41,812.

The industries are divided into nineteen classes, and the number of hands employed in each class during 1896, 1901, and each of the last three years, was as follows:—

Class of Industry.	No. of Hands Employed.				
	1896.	1901.	1905.	1906.	1907.
Treating Raw Materials, Product of Pastoral Pursuits, &c. ... ..	3,748	2,981	2,917	3,209	3,727
Oils and Fats, Animal, Vegetable, &c. ... ..	410	698	660	681	639
Processes in Stone, Clay, Glass, &c. ... ..	2,441	3,007	3,413	3,877	3,675
Working in Wood ... ..	3,934	5,108	5,244	5,205	5,896
Metal Works, Machinery, &c. ... ..	8,705	13,926	13,831	15,339	18,093
Connected with Food and Drink, &c. ... ..	10,179	11,372	11,546	11,607	12,064
Clothing and Textile Fabrics, &c. ... ..	9,750	14,497	18,106	19,650	21,897
Books, Paper, Printing, and Engraving ... ..	4,940	5,573	6,468	6,961	7,593
Musical Instruments ... ..	18	226	348	338	380
Arms and Explosives ... ..	...	11	16	17	16
Vehicles and Fittings, Saddlery and Harness, &c. ... ..	1,592	2,541	2,417	2,667	3,464
Ship and Boat Building, &c. ... ..	1,132	1,541	1,478	1,595	1,705
Furniture, Bedding, and Upholstery ... ..	1,183	2,140	1,966	2,317	2,481
Drugs, Chemicals, and By-products ... ..	331	450	869	1,012	1,106
Surgical and other Scientific Instruments ... ..	35	69	71	86	84
Jewellery, Timepieces, and Plated Ware ... ..	102	165	393	457	626
Heat, Light, and Power ... ..	859	1,417	1,676	1,883	2,040
Leatherware, N.E.I. ... ..	33	117	180	240	272
Minor Wares, N.E.I. ... ..	448	391	576	681	709
Total ... ..	49,840	66,230	72,175	77,822	86,467

It will be seen that, coincident with the decrease in live stock, there was a decline in the industries dealing with pastoral products, which are, however, again showing signs of a revival. Establishments working in connection with stone, clay, glass, &c., show an increased employment, due largely to the expansion of the brickyards; and the increase in wood-workers is mainly due to the increased business of saw-mills and joinery works, indicating greater activity in the building trades. Metal works show a great advance since 1896, and almost every branch of the industry discloses an improvement, the most noticeable being smelting, railway workshops, and carriage building, ironworking, and engineering. The clothing industry shows a general increase in almost all its branches. In furniture-making there has been a large increase in the number of hands; but the industry is, to a large extent, in the possession of the Chinese. The extension of electric power has led to a considerable increase of employment, and in the minor industries there is also evidence of greater activity.

The following table has been prepared in order to show, in as concise a manner as possible, the principal details respecting each class of industry for the year 1907:—

Class of Industry.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
Treating Raw Materials, &c. ....	205	3,702	25	3,727	months	£	No.	£
Oils and Fats, &c. ....	40	531	108	639	9'28	242,761	3,150	261,074
Processes in Stone, Clay, Glass, &c.	258	3,591	84	3,675	11'42	45,658	381	158,923
Working in Wood ...	522	5,872	24	5,896	11'12	306,927	4,302	426,840
Metal Works, Machinery, &c. ....	428	18,025	68	18,093	10'73	466,832	6,974	436,816
Connected with Food and Drink, &c. ....	756	9,518	2,546	12,064	11'72	1,884,144	10,724	1,850,946
Clothing and Textile Fabrics, &c.	885	6,942	14,855	21,897	10'97	898,637	14,386	2,553,063
Books, Paper, Printing, &c. ....	365	5,901	1,692	7,593	11'65	1,049,406	1,451	313,329
Musical Instruments ...	12	343	37	380	11'93	637,583	1,508	767,271
Arms and Explosives ...	3	14	2	16	12'00	35,298	43	6,292
Vehicles, Saddlery, and Harness, &c. ....	345	3,402	62	3,464	12'00	1,220	4	200
Ship and Boat Building, &c. ....	36	1,704	1	1,705	11'75	243,910	306	61,922
Furniture, Bedding, and Upholstery ...	144	2,309	172	2,481	11'94	215,765	2,281	163,393
Drugs, Chemicals, and By-products ...	58	722	384	1,106	11'60	190,091	386	33,696
Surgical and other Scientific Instruments ...	8	66	18	84	11'68	76,382	476	124,208
Jewellery, Plated Ware, &c. ....	46	566	60	626	12'00	6,348	2	2,760
Heat, Light, and Power ...	166	1,977	63	2,040	11'91	48,548	29	20,193
Leatherware, N.E.I. ....	14	241	31	272	11'82	243,281	34,740	1,835,803
Minor Wares, N.E.I. ....	51	527	182	709	11'58	16,805	58	5,999
Minor Wares, N.E.I. ....	51	527	182	709	11'90	40,819	92	21,044
Total ...	4,432	65,953	20,514	86,467	11'43	6,650,715	81,293	9,043,772

The hands employed in the manufactories numbered 86,467, but only 71,388 were actually engaged in the different processes of manufacture, or in the sorting and packing of finished articles. The number of employees and their occupation was as follows:—

Class of Industry.	Working Proprietors, Managers, and Overseers.	Clerks, &c.	Engine-drivers, &c.	Workers in Factory, Mill, &c.	Carters, Messengers, &c.	Persons regularly employed at their own homes.	Total.
Treating Raw Materials, Product of Pastoral Pursuits, &c. ....	400	78	185	2,912	152	...	3,727
Oils and Fats, Animal, Vegetable, &c.	62	57	19	477	18	6	639
Processes in Stone, Clay, Glass, &c.	355	107	149	2,840	224	...	3,675
Working in Wood ...	772	265	394	4,120	345	...	5,896
Metal Works, Machinery, &c. ....	841	528	415	15,989	316	...	18,093
Connected with Food and Drink, &c.	1,077	624	611	9,101	651	...	12,064
Clothing and Textile Fabrics, &c. ....	1,315	260	29	19,498	233	562	21,897
Books, Paper, Printing, and Engraving	740	520	47	6,021	265	...	7,593
Musical Instruments ...	18	19	2	339	2	...	380
Arms and Explosives ...	4	...	...	11	1	...	16
Vehicles and Fittings, Saddlery and Harness, &c. ....	467	91	13	2,830	61	2	3,464
Ship and Boat-building, &c. ....	73	47	30	1,465	90	...	1,705
Furniture, Bedding, and Upholstery	225	50	10	2,151	39	6	2,481
Drugs, Chemicals, and By-products	108	64	25	875	22	12	1,106
Surgical and other Scientific Instruments ...	11	7	1	58	7	...	84
Jewellery, Timepieces, and Plated Ware ...	65	27	...	516	15	3	626
Heat, Light, and Power ...	154	82	373	1,366	65	...	2,040
Leatherware, N.E.I. ....	24	5	1	236	6	...	272
Minor Wares, N.E.I. ....	64	26	4	583	31	1	709
Total ...	6,775	2,857	2,308	71,388	2,543	592	86,467

## INDUSTRIES TREATING RAW MATERIALS, THE PRODUCT OF PASTORAL AND AGRICULTURAL PURSUITS.

The decrease in the number of stock depastured, following on a succession of adverse seasons, necessarily reduces the production of raw material, and consequently fewer hands are required in the treatment thereof.

Industries.	Number of Establish- ments.	Average number of Hands employed.			Average time worked per hand.	Amount of wages paid.	Average Horse-power of Machinery used.	Value of Machinery Plant, &c.
		Males.	Females.	Total.				
I.—TREATING RAW MATERIAL, &c.								
Boiling-down and Tallow Reining	36	426	16	442	9.44	34,284	479	59,436
Tanneries ... ..	85	1,022	1	1,023	11.78	78,778	875	70,351
Woolscouring and Fellmongering	67	1,478	6	1,484	8.54	94,332	1,176	89,499
Chaff-cutting, &c. ... ..	102	623	1	624	6.15	21,015	620	41,088
Sausage skins ... ..	5	153	1	154	12.00	11,352	...	700
Total ... ..	295	3,732	25	3,727	9.28	242,761	3,150	261,074

The figures do not include boiling-down and wool-washing works on stations, as they are only in operation for a few weeks in each year. The number of hands employed varies considerably during the year, and in certain seasons many more persons are at work, especially at wool-scouring.

Tallow refining is not the important industry it was ten or twelve years ago, when there was a large surplus of live stock to be disposed of each year, with the price of tallow high enough to encourage the disposal of stock in this manner. With the return of good seasons, however, together with an increase in prices, there has been an increase in the production of tallow during the last four years.

Exclusive of operations on stations and large farms, carcases, fat, refuse, bones, etc., to the value of £454,000 were treated during 1907 in boiling-down and manure works, and produced 319,354 cwt. of raw and refined tallow, valued at £452,146; 264,606 cwt. of blood and bone manures, valued at £74,473; whilst the return from hides, oils, bones, and other by-products amounted to £59,811.

In wool-scouring works and fellmongeries 42,076,543 lb. of greasy wool and 4,321,802 skins were treated, producing 20,658,015 lb. and 14,315,380 lb., respectively, of scoured wool, valued in the aggregate at £2,325,832. The pelts obtained were valued at £218,968.

In tanneries, 445,271 hides produced 13,752,311 lb. of leather, worth £703,003. In addition, 3,297,331 pelts were operated on, 1,254,320, valued at £81,989 being pickled. The others were converted into 2,128,960 lb. of basils, valued at £167,250. Wattle bark to the extent of 10,451 tons was used for tanning purposes.

## OILS AND FATS—ANIMAL, VEGETABLE, &amp;c.

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages Paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
II.—OILS, FATS, &c.								
Oil and Grease ... ..	6	86	6	92	months 9.85	£ 8,801	No. 174	£ 31,612
Soap and Candles ... ..	34	445	102	547	11.47	36,837	207	127,311
Total... ..	40	531	108	639	11.42	45,638	381	158,923

Tallow being one of the staple products of the country, the manufacture of soap and candles, as might be expected, is firmly established. The quantity of toilet and fancy soap made, is, however, as yet but small, and in quality it is scarcely equal to that imported. Common soap of local make is both cheaper and better than the imported article, and practically commands the local market.

With the extension of gas-lighting, which is now almost universal throughout the habitations in the metropolitan district, the consumption of candles gradually decreased, and there was a corresponding decrease in the production, which was almost wholly for local use. In recent years there has been an improvement, and an export trade with the other States has sprung up. The following table gives particulars of the soap and candle making industry during the last ten years:—

Year.	Soap and Candle Factories.	Hands Employed.	Quantity manufactured (as returned by manufacturers).		Horse-power of Plant (full capacity).
			Soap.	Candles.	
	No.	No.	cwt.	lb.	H.-p.
1898	35	276	139,983	2,312,778	663
1899	41	287	142,526	2,675,006	614
1900	43	351	147,515	2,073,427	818
1901	44	533	233,700	3,897,468	829
1902	40	425	175,822	2,965,766	533
1903	47	520	199,807	3,231,842	744
1904	46	508	208,677	3,984,035	556
1905	40	574	212,658	4,226,082	520
1906	41	602	221,834	5,076,048	522
1907	34	547	234,022	5,656,354	489

The candles manufactured include those made from paraffin also, but as they are the product of a single firm the actual quantity may not be disclosed. During 1907, in addition to the commodities shown in the above table, 330,900 lb. of soap extract and powders were made. 115,173 cwt. of tallow, 5,364,485 lb. of alkali, and £17,140 worth of other materials were used in the manufacture.

#### PROCESSES IN STONE, CLAY, GLASS, &c.

As the majority of these industries are closely associated with the building trade, the employment afforded reflects, to a great extent, the condition of that trade. The number of hands employed has not varied much since 1901, but shows a substantial increase since 1898. The details of each industry for 1907 were as follow:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
III.—STONE, CLAY, GLASS, &c.								
Bricks and Tiles ... ..	186	1,820	24	1,844	Months	£	No.	£
Glass (including Bottles)...	7	415	...	415	10-57	159,527	2,258	208,910
Glass (Ornamental)...	14	194	4	198	12-00	34,601	18	11,700
Lime, Plaster, Cement, and Asphalt ... ..	25	571	1	572	12-00	15,110	27	6,387
Marble, Slate, &c. ... ..	11	163	...	163	11-94	51,527	1,757	155,425
Modelling, &c. ... ..	2	10	...	10	11-88	14,471	101	13,100
Pottery and Earthenware ..	13	418	55	473	12-00	791	2	312
					11-57	30,890	139	31,006
Total... ..	258	3,591	84	3,675	11-12	306,927	4,302	426,240

In 1891 there were 2,018 hands employed in brickworks, and the output of bricks was 184,682,000. There was then a decline in building operations, and during the two years after the crisis of 1893 the output fell below 100,000,000. There has since been an improvement, as will be seen from the following figures, which give the details of the industry during the last ten years:—

Year.	Brickworks.	Hands Employed.	Bricks made (as returned by makers).	Horse-power of Plant (full capacity).
	No.	No.	No.	H.-p.
1898	131	1,252	113,126,000	1,281
1899	148	1,448	120,375,000	1,552
1900	157	1,535	128,430,000	1,639
1901	182	1,823	159,254,000	1,543
1902	182	1,973	180,727,000	1,986
1903	163	1,921	202,681,000	2,243
1904	165	1,893	154,480,000	2,701
1905	172	2,006	162,643,000	2,974
1906	187	2,147	172,010,000	3,172
1907	186	1,844	195,594,000	3,535

The manufacture of tiles, pottery, and earthenware is usually carried on in conjunction with brickmaking, although there are establishments devoted solely to this branch of the industry. The value of the tiles, pottery, and earthenware manufactured in 1907 was £84,359, of which £23,418 was produced from works principally engaged in brickmaking.

#### WORKING IN WOOD.

These industries are largely connected with the supply or preparation of building materials, and, like those in the class immediately preceding, afford a reliable index to the state of the building trade.

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
IV.—WORKING IN WOOD.								
Boxes and Cases ... ..	22	389	1	390	Months 11-95	£ 34,038	No. 386	£ 15,793
Cooperage ... ..	14	243	...	243	12-00	20,137	114	24,176
Joinery... ..	83	1,143	6	1,149	11-57	96,886	340	57,665
Saw-mills ... ..	377	3,967	16	3,983	10-27	308,845	6,038	332,239
Wood Turning, &c....	26	130	1	131	11-17	6,976	96	6,943
Total... ..	522	5,872	24	5,896	10-73	466,832	6,974	486,816

Of the 5,896 hands employed in these industries, 2,229 were engaged in the metropolitan district, and 3,667 in the country, the employment in the latter district being almost wholly in connection with saw-mills, which provided work for 3,348 hands. The total number of hands engaged in saw-mills numbered 3,983, which shows an increase compared with the

figures for recent years, but is far below the total in 1892. The details of the industry during the last ten years were as follow :—

Year.	Saw-mills.	Hands Employed.	Plant and Machinery.		Year.	Saw-mills.	Hands Employed.	Plant and Machinery.	
			Power (full capacity).	Value.				Power (full capacity).	Value.
	No.	No.	H.-p.	£		No.	No.	H.-p.	£
1898	259	3,061	5,176	212,555	1903	333	3,936	6,857	289,258
1899	259	3,004	5,130	213,477	1904	324	3,655	6,379	285,935
1900	269	3,294	5,499	242,900	1905	339	3,886	6,848	286,011
1901	345	4,088	6,547	273,883	1906	338	3,642	6,587	260,810
1902	331	3,930	6,536	273,402	1907	377	3,983	8,713	332,239

During 1907 the output of sawn timber from locally grown logs amounted to 122,998,000 superficial feet, of which, 84,581,000 superficial feet, or considerably more than two-thirds, represented hard-woods. The number of imported logs operated on was comparatively small, and produced only 4,695,000 superficial feet of sawn timber, of which 4,528,000 feet represented soft-woods.

The growth of the employment in box factories is a testimony to the great advances made by the export trade in butter and rabbits, the former being despatched in boxes and the latter in crates. As showing the increased employment, it may be mentioned that in 1898 there were only 112 hands employed in these establishments, as compared with 390 in 1907.

#### METAL WORKS, MACHINERY, &c.

The industries comprised in this class are the most important to the industrial workers in the State, for, although the clothing trade employs more hands, in the amount of wages paid it is greatly below the metal-working industry, owing to the large percentage of females employed.

The following table shows the employment afforded, and other particulars, for each branch of the industry during 1907:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery and Plant.
		Males.	Females.	Total.				
V.—METAL WORKS, MACHINERY, &c.					Months	£	No.	£
Agricultural Implements	21	496	3	499	11.63	39,431	126	16,426
Brass and Copper	12	225	...	225	12.00	14,742	49	11,930
Cutlery	6	30	...	30	12.00	1,981	13	1,770
Engineering	125	3,884	14	3,898	11.88	353,033	1,720	285,485
Galvanised Iron	37	623	13	635	11.95	47,155	99	22,295
Ironworks and Foundries	54	2,009	4	2,103	11.82	181,874	1,777	232,178
Lead Mills	2	21	...	21	12.00	2,752	160	11,000
Railway Carriages	4	735	3	738	12.00	66,722	267	41,770
Railway and Tramway Workshops	21	3,891	11	3,902	12.00	491,441	828	366,666
Smetting	50	4,215	1	4,216	11.36	547,839	5,231	778,694
Stoves and Ovens	14	388	5	393	12.00	29,350	62	12,636
Tinsmithing	60	660	9	669	11.70	41,732	114	24,413
Wireworking	9	446	3	449	12.00	37,817	160	25,788
Other Metal Works	13	313	2	315	12.00	28,275	108	19,900
Total	428	18,025	68	18,093	11.72	1,884,144	10,724	1,850,946

In 1898 there were only 10,234 hands engaged in works of this class, so that there has been an increase of 7,859, or 77 per cent., since that year. The chief increase is in works connected with the manufacture and repairs of railway engines and carriages, which show 1,820 more hands; and this

is only to be expected, in view of the large increase in rolling-stock, consequent upon the development of the railways and the extension of the metropolitan tramway system. Engineering works show an increase of 774 hands since 1898, the increase for 1907 being partly due to the local manufacture of locomotives, and ironworks 1,128.

In considering the figures in the above table it should be remembered that the work carried out at the railway and tramway workshops is of such a character that the particulars shown under this heading and for engineering should be taken together.

In smelting works there are now 1,600 more hands employed than there were in 1898. The majority of the work done is in connection with the treatment of silver and lead ores; but there are other establishments dealing with gold, copper, tin, and other ores, which are brought from all parts of the Commonwealth, and also from New Caledonia. Quartz batteries are excluded from these figures, but establishments using a cyanide plant are included. Within recent years, zinc-extracting plants on an extensive scale have been established in the State, and both at Broken Hill and elsewhere great attention is being directed to this matter. Further details in connection therewith are given in the chapter dealing with "Mining Industry."

#### INDUSTRIES CONNECTED WITH FOOD AND DRINK, AND NARCOTICS.

From the figures given in an earlier part of this chapter it would appear that industries connected with food and drink have increased but little in importance since 1898, for the hands then employed numbered only 2,734 less than in 1907. Investigation shows, however, that there have been large individual increases in several industries, but these have been counterbalanced by a decline in sugar-milling, and in meat preserving and freezing. In 1907 there were 12,064 hands usually employed in this class, but the number fluctuates considerably during the year, as employment in establishments manufacturing aerated waters, butter, cheese, flour, sugar, and jam varies with the seasons. The following table shows the average number of hands employed in each industry during 1907:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females	Total.				
CLASS VI. — FOOD AND DRINK, &c.								
Bacon-curing .. .. .	16	130	..	130	Months. 10·96	£ 14,822	No. 78	£ 9,946
Butter Factories and Creameries	158	891	3	894	11·41	82,250	1,980	225,711
Butterine and Margarine .. .	2	24	..	24	12·00	1,770	14	1,700
Cheese Factories .. .. .	27	80	4	84	11·05	5,644	39	6,527
Condensed Milk .. .. .	3	37	8	45	12·00	2,632	36	10,500
Meat and Fish Preserving .. .	10	499	83	582	8·07	28,674	193	19,220
Biscuits .. .. .	6	580	543	1,123	11·45	62,397	205	65,076
Confectionery .. .. .	34	741	478	1,219	11·92	60,153	211	52,403
Cornflour, Oatmeal, &c. .. .	17	215	185	400	11·53	26,962	383	43,605
Flour-mills .. .. .	74	856	2	858	10·73	92,095	3,659	273,459
Jam and Fruit Canning .. .	17	494	377	871	10·95	35,160	155	17,740
Pickles, Sauces, and Vinegar ..	17	107	147	254	11·78	14,795	41	7,095
Sugar Mills .. .. .	5	608	2	610	6·31	46,844	3,113	507,324
Sugar Refinery .. .. .	1	431	..	431	12·00	52,622	528	388,247
Aerated Waters, Cordials, &c. ..	236	1,297	56	1,353	11·69	82,925	463	101,350
Breweries .. .. .	38	851	3	854	12·00	110,953	552	252,414
Condiments, Coffee, Spices, &c. ..	14	203	160	363	12·00	19,209	210	22,845
Distilleries .. .. .	2	17	..	17	12·00	2,675	3	32,508
Ice and Refrigerating .. .. .	63	797	4	801	8·94	70,292	2,230	381,590
Malting .. .. .	5	48	..	48	8·15	4,465	20	22,507
Tobacco, Cigars, &c. .. .	11	612	491	1,103	11·31	80,798	268	111,296
Total .. .. .	756	9,518	2,546	12,064	10·97	898,637	14,386	2,553,063

In the preparation of food and drink, machinery enters largely into use, as will be seen from the figures given above. There are many important industries in this class, but for only a few of them is information available regarding the materials treated and the output of manufactured articles. Taking these in their order, it will be seen that the industries first enumerated deal wholly with dairy products. The production from these industries is not included in the value of production from manufactories, as it belongs essentially to the dairying industry, and has been included therein. Creameries are not counted as separate establishments when worked in conjunction with butter factories; but the hands employed are included in the figures given. There has been an enormous increase in the quantity of butter made in recent years, especially in the factory-made article. In the following table will be found particulars of the machinery in use and the number of hands employed during each of the last ten years. The numbers of factories and hands do not coincide with those shown in the preceding table, as they include factories on farms, the hands in which (171 males and 15 females in 1907) are not exclusively engaged in manufacturing dairy products alone, but in general farm labour, and are consequently included elsewhere:—

Year.	Factories								Estimated Value of Plant and Machinery.	Machinery in use.							Persons employed.	
	Butter only.	Creameries only.	Cheese only.	Bacon and Ham only.	Butter and Cheese.	Butter and Bacon.	Butter, Cheese, and Bacon.	Total.		Engines.	Horse-power.	Butter Workers.	Churns.	Cream Separators.	Cheese Presses.		Males.	Females.
	No.	No.	No.	No.	No.	No.	No.	No.	£	No.	No.	No.	No.	No.	No.		No.	No.
1898	187	356	23	10	7	..	3	586	248,844	608	3,332	192	272	724	202		1,432	97
1899	168	357	16	12	7	1	1	562	255,702	608	3,497	112	267	684	175		1,433	55
1900	164	346	19	13	7	4	3	556	255,320	605	3,456	198	272	667	177		1,378	47
1901	158	479	21	14	12	5	1	690	260,513	734	3,753	163	263	772	116		1,586	71
1902	163	303	31	18	6	3	1	528	263,764	576	3,207	153	274	571	147		1,304	56
1903	153	284	31	16	4	3	3	494	246,350	552	3,094	163	262	486	146		1,373	33
1904	145	271	28	14	4	2	1	465	251,322	525	3,066	178	257	431	96		1,364	26
1905	153	255	36	16	3	..	..	463	277,908	546	3,179	195	280	425	104		1,342	9
1906	170	193	57	20	4	..	1	445	255,109	511	3,453	199	311	358	105		1,420	33
1907	176	140	36	16	6	..	..	374	278,380	447	3,413	213	321	274	113		1,309	10

In view of the smaller number of live stock, it is only natural that the operations of meat-preserving should have declined. There were only 582 hands employed in 1907, as against 1,037 in 1898. The carcasses of 5,197 cattle and 554,072 sheep were treated in meat-preserving works, and of 2,248 cattle and 1,366,543 sheep in freezing establishments.

For meat-preserving 2,866,124 lb. of meat were also purchased, in addition to 362 pigs, and tongues and sundries to the value of £3,960. The output of tinned meat was 12,134,231 lb., valued at £264,179, and other edible by-products were valued at £6,506.

The amount of mill-power for grinding and dressing grain is ample for treating the flour consumed in the State; and the fact that New South Wales now produces more than sufficient wheat for its own requirements

does not, therefore, make an increase in the number of flour-mills probable, as those in existence are not kept working to their full capacity.

In consequence of the failure of the wheat crop for the 1902-3 season, the operations of the mills were much restricted; but with the return of good seasons the industry has resumed its normal position. The following table shows various details regarding flour-mills for a period of ten years :—

Year.	Flour Mills.	Hands Employed.	Wheat operated upon.	Flour made.	Plant and Machinery.	
					Power (full capacity).	Value.
	No.	No.	Bushels.	Tons.	H. p.	£
1898	80	757	7,979,461	170,473	3,955	260,917
1899	80	815	7,458,366	156,409	4,065	269,753
1900	86	841	8,345,063	170,423	4,368	275,910
1901	89	889	9,369,534	191,504	4,421	254,335
1902	81	812	8,853,048	185,147	4,495	267,372
1903	79	751	6,030,409	121,074	4,947	262,297
1904	81	875	10,418,979	210,137	4,851	293,328
1905	78	875	10,117,793	205,805	5,158	294,760
1906	78	873	11,151,126	225,995	5,532	297,859
1907	74	858	11,617,905	237,614	4,342	273,459

During 1907 the output of bran and pollard amounted to 63,907 tons and 37,995 tons, respectively. There does not appear to be any fixed proportion for these by-products, especially in the country districts, as the quantity of each article is regulated solely by the supply and demand.

The principle articles produced in jam and pickle factories during the same year were 24,489,960 lb. of jam and preserves, 543,840 lb. of candied peel, 2,107,357 pints of pickles, 865,800 pints of sauces, and 368,986 gallons of vinegar.

Particulars regarding the output of aerated-water factories are now available, and show that during 1907 the following articles were produced, viz.:—765,670 syphons and 3,915,703 dozen bottles of aerated and carbonated waters, 76,024 dozen of cordials, 43,644 dozen of syrups, 197,780 dozen of hop beer, 439,835 dozen of ginger beer, and £7,574 worth of other cordials. The hands employed show an increase of 373 since 1898, but the number varies with the season of the year, the greatest number at work in 1907 being 1,548. The number of breweries is becoming less each year, although the persons engaged show a slight increase since 1898. The materials used in breweries for manufacturing purposes and the actual output were:—

		Malt.	Hops.	Sugar.	Other	Ale, Beer, &c.,
		bushels.	lb.	tons.	Material.	manufactured.
					centals.	gallons.
1903	...	466,673	601,339	3,495	10,081	14,211,888
1904	...	441,844	557,400	3,252	10,133	13,651,203
1905	...	458,371	558,661	3,370	6,209	13,873,239
1906	...	488,982	586,438	3,405	5,530	14,032,390
1907	...	533,825	636,630	3,651	4,996	15,361,227

The output shown above is the actual quantity manufactured, and differs from the figures in the following table, which gives the quantity on which excise was paid:—

Year.	Breweries.	Hands Employed.	Ale, Beer, &c., manufactured, which paid Excise.	Horse-power of Plant (full capacity).	Year.	Breweries.	Hands Employed.	Ale, Beer, &c., manufactured, which paid Excise.	Horse-power of Plant (full capacity).
	No.	No.	Gallons.	H.-p.		No.	No.	Gallons.	H.-p.
1898	56	830	11,674,880	1,384	1903	45	969	13,201,098	982
1899	57	885	12,218,560	1,279	1904	42	968	12,877,757	961
1900	52	920	13,410,800	1,623	1905	42	1,028	13,248,336	1,089
1901	51	1,016	13,253,600	1,477	1906	39	881	13,587,336	1,087
1902	46	1,033	14,029,648	1,074	1907	38	854	14,994,537	1,253

The local malt works treated 192,679 bushels of barley during 1907, and produced 182,947 bushels of malt, valued at £69,374.

There are two distilleries in the State, one of which is a wine distillery, the output being 14,607 proof gallons of brandy from 86,020 gallons of wine; the other establishment is worked in connection with sugar-refining, and used 168,100 cwt. of molasses in 1907 for 863,131 gallons of proof spirit.

A number of vigneronns are licensed by the Customs Department to distil spirit for fortifying purposes, and during the year 86,411 gallons of wine produced 14,280 proof gallons of brandy.

The manufacture of sugar has long been an important industry, and so far back as 1878 the sugar-mills in the State numbered 50, of which 24 used steam-power, and 26 were worked by cattle, and the number of workmen employed being 1,065. These had increased in the year 1886 to 83 steam-mills and 19 worked by cattle, whilst the number of men employed and the quantity of sugar and molasses turned out had correspondingly increased; but since that time the fall in the value of sugar has caused the closing of all the smaller establishments. Almost everywhere the tendency to concentrate the manufacture of sugar in large central establishments is increasing, and the small mills are rapidly disappearing to make room for larger establishments, where business is strictly confined to the industrial process of sugar-making, the planters attending solely to the cultivation of the cane. Owing to the fact that many of the farmers on the North Coast have abandoned sugar-growing in favour of dairying, the area under cane is much smaller than it was ten years ago, and the production has correspondingly decreased. There are at present only 5 mills in the State, and employment is afforded to little more than half the number of hands engaged ten years ago:—

Year.	Sugar Mills.	Hands Employed.	Horse-power of Plant (full capacity).	Quantity manufactured (as returned by manufacturers).	
			Steam.	Sugar.	Molasses.
	No.	No.	H.-p.	cwt.	Gallons.
1898	20	1,168	3,331	582,198	1,647,785
1899	13	1,038	3,212	307,048	1,064,850
1900	8	690	2,988	398,760	1,179,600
1901	12	695	2,995	390,375	1,300,909
1902	8	633	3,407	430,884	1,073,640
1903	6	586	3,146	435,718	1,367,020
1904	6	643	3,146	400,150	1,296,590
1905	5	652	3,140	402,040	1,263,100
1906	5	622	3,485	479,993	1,305,466
1907	5	610	3,491	593,446*	1,211,000*

\* From 277,386 tons of sugar-cane.

There is only one sugar refinery in the State, and it treats both local and imported sugars, so that its operations are extending each year. The hands employed show a great decrease since 1900, but owing to increased power and improvements in plant, the quantity of sugar treated has increased. The following table shows particulars of the industry since 1898. The sugar-cane treated in 1907 represented 1,514,840 cwt. of refined sugar:—

Year.	Sugar Refinery.	Hands Employed.	Cane Sugar Treated.	Horse-power of Plant (full capacity).	Year.	Sugar Refinery.	Hands Employed.	Cane Sugar Treated.	Horse-power of Plant (full capacity).
	No.	No.	cwt.	H-p.		No.	No.	cwt.	H-p.
1898	1	454	948,400	500	1903	1	415	1,284,380	973
1899	1	450	1,032,400	550	1904	1	390	1,313,800	974
1900	1	510	1,191,000	700	1905	1	410	1,368,000	948
1901	1	450	1,246,600	1,000	1906	1	454	1,459,400	932
1902	1	531	1,179,200	958	1907	1	431	1,554,200	1,031

Tobacco of local manufacture is, to a large extent, superseding the imported article, while cigarettes made in this State now practically command the Australian market, and the manufacture of cigars is also increasing.

A large amount of imported leaf is used in the manufacture of tobacco in the State, the proportion of locally-grown tobacco being less than one-third. As shown in the chapter on "Agriculture," the acreage and production of tobacco declined in each year from 1897 to 1902. A decided increase is noticeable in later years, and efforts have been made to stimulate the industry, the manufacturers having arranged to take all the leaf grown, at certain fixed prices according to quality. The following table shows details of the operations of tobacco factories for the last ten years. The large increase in the number of females is principally due to the extension of cigarette making:—

Year.	Establishments.		Hands Employed.		Tobacco Leaf used.		Tobacco, Cigars, and Cigarettes manufactured			Plant and Machinery.	
	Tobacco.	Cigars and Cigarettes.	Males.	Females.	Australian grown Leaf.	Imported Leaf.	Tobacco.	Cigarettes.	Cigars.	Power (full capacity).	Value.
	No.	No.	No.	No.	lb.	lb.	lb.	lb.	lb.	H.-p.	£
1898	9	14	526	172	1,224,919	1,110,751	2,081,260	232,732	21,678	204	44,710
1899	9	18	544	197	1,243,580	1,167,417	2,123,196	288,509	29,265	204	44,574
1900	7	13	557	292	875,236	1,558,970	2,045,932	364,803	50,168	221	49,165
1901	6	14	621	440	883,615	2,114,456	2,524,231	457,276	67,128	302	69,124
1902	5	13	678	440	966,156	2,520,581	3,089,613	634,175	66,330	338	82,269
1903	5	18	669	426	1,009,745	2,714,578	3,329,938	790,697	45,297	462	92,355
1904	4	17	643	376	1,256,339	2,709,569	3,404,201	829,851	47,756	464	106,793
1905	4	16	573	391	1,145,923	2,606,702	3,318,719	818,400	48,850	425	104,766
1906	5	20	649	397	1,178,183	3,056,906	4,057,965	837,834	50,326	431	104,226
1907	5	23	622	497	1,050,107	3,254,656	3,899,196	972,875	54,048	435	111,346

Prior to 1902 the figures in column six, showing the tobacco leaf used, represent New South Wales leaf only.

## CLOTHING AND TEXTILE FABRICS.

These industries afford the greatest employment, but in point of production and wages paid they are below several of the other classes. Since 1898 the number of hands employed has increased by 11,229, of whom 2,261 were males and 8,968 females. In the earlier year males represented 44 per cent. of the total employees, and in 1907 only 32 per cent. The number of hands engaged in each branch of the industry is shown in the following table:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery Plant, &c.
		Males.	Females.	Total.				
CLASS VII.—CLOTHING AND TEXTILE FABRICS, &c.					Months.	£	No.	£
Woollen and Tweed Mills ..	5	179	216	395	11·76	17,588	307	39,435
Boots and Shoes ..	102	3,163	1,623	4,786	11·78	299,613	648	131,884
Slop Clothing ..	69	896	4,066	4,962	11·52	225,747	72	34,779
Clothing (Tailoring) ..	286	1,826	2,207	4,033	11·67	261,787	....	12,690
Dressmaking and Millinery (makers' material) ..	188	54	3,371	3,425	11·78	98,006	2	8,363
Dressmaking and Millinery (customers' material) ..	148	2	1,050	1,052	11·50	15,017	....	4,244
Dyeworks and Cleaning ..	6	33	29	62	12·00	3,463	6	2,055
Furriers ..	3	19	16	35	12·00	2,316	1	240
Hats and Caps ..	22	335	759	1,094	12·00	46,567	136	35,653
Waterproof and Oilskin ..	4	28	131	159	12·00	6,922	10	2,807
Shirts, Ties, and Scarfs ..	38	113	1,341	1,454	10·96	45,791	36	13,411
Rope and Cordage ..	5	183	4	187	12·00	13,727	189	22,847
Tents and Tarpaulins ..	9	111	142	253	12·00	12,862	44	4,923
Total .. ..	885	6,942	14,955	21,897	11·65	1,049,406	1,451	313,329

It is a strange anomaly to find that in New South Wales, the greatest wool-producing country in the world, only 395 hands find employment in the manufacture of woollen materials. Woollen-mills were amongst the earliest works established in the State, but the industry has progressed but little since its inception, and the number of hands employed until the last two years, when a decided increase took place, has practically remained stationary for forty years. Details of the hands employed, and the output for the last ten years, are given below:—

Year.	Woollen Mills.	Hands Employed.			Woollen Cloth and Tweed manufactured.	Horse-power of Plant (full capacity).
		Males.	Females.	Total.		
	No.	No.	No.	No.	yds.	H. p.
1898	5	169	72	241	487,374	250
1899	4	144	78	222	428,158	215
1900	4	163	58	221	460,187	210
1901	4	162	72	234	525,020	325
1902	4	172	104	276	566,296	305
1903	4	170	110	280	458,302	330
1904	3	148	97	245	481,289	305
1905	3	151	111	262	459,590	329
1906	5	160	178	338	498,164	327
1907	5	179	216	395	512,640	397

During 1907 481,704 lb. of scoured wool were used, and, in addition to the cloth shown above, there were manufactured flannel, blankets, rugs, and shawls to the value of £14,369. The quantity of cloth manufactured showed no signs of increase until the latter half of 1905, and it is apparent that a disinclination has existed, on the part of purchasers, to

buy clothing made from locally-made tweed, notwithstanding that the mills are capable of producing cloth of very high quality. Since 1905 there has been an improved demand for locally-made cloth; but until the prejudice in favour of imported tweeds has been overcome, no great expansion in the industry can be hoped for.

The largest employment in this class is afforded by boot and shoe factories and their progress has been more satisfactory, as will be seen from the following table:—

Year.	Boot and Shoe Factories.	Hands Employed.			Output (as returned by manufacturers).	
		Males.	Females.	Total.	Boots and Shoes made.	Slippers, and Canvas and Cloth Shoes made.
	No.	No.	No.	No.	Pairs.	Pairs.
1898	76	2,655	845	3,500	2,904,783	237,120
1899	79	2,602	908	3,510	3,207,196	285,365
1900	94	2,906	1,047	3,953	3,269,935	387,156
1901	100	2,861	1,118	3,979	2,821,724	512,584
1902	102	2,886	1,212	4,098	3,052,914	451,588
1903	93	2,938	1,350	4,288	3,166,475	397,531
1904	92	2,858	1,459	4,317	3,291,087	477,302
1905	98	3,021	1,444	4,465	3,250,243	435,912
1906	102	3,178	1,589	4,767	3,567,555	378,599
1907	102	3,163	1,623	4,786	3,637,868	510,132

A striking feature of the above table is the large increase in the employment of females. During the ten years the number of males increased by 508, while the females increased by 778, or over 92 per cent., and now represent about one-third of the hands employed.

Of all the industries none has progressed so rapidly as that connected with the manufacture of hats and caps. Until 1898 less than 100 hands were employed, but each year has seen an increase, and in the five years from 1903 to 1907 there was an average annual increase of about 120 hands:—

Year.	Hat and Cap Factories.	Hands Employed.			Power of Machinery.	Value of Plant and Machinery.
		Males.	Females.	Total.		
	No.	No.	No.	No.	H.-p. (full capacity).	£
1898	4	39	77	116	6	5,550
1899	5	63	121	184	16	4,000
1900	10	97	183	280	15	5,300
1901	10	132	198	330	27	7,034
1902	10	185	289	474	37	19,422
1903	15	225	318	543	142	22,152
1904	18	269	460	729	139	26,117
1905	21	318	586	904	120	29,650
1906	23	342	694	1,036	144	32,570
1907	22	335	759	1,094	175	35,653

The hats and caps manufactured during 1907 numbered 1,718,286, valued at £159,333.

A large number of females now find employment in making shirts, ties, and scarfs. So far as this State is concerned, the industry is comparatively new, for in 1898 only 741 persons were thus engaged, and in 1900, before the Federal tariff came into operation, 133. In 1907 the number was 1,454.

There has been a large increase in the number of hands engaged in the clothing trade, both in "slops" and order work, and in the former trade more attention is being devoted to the manufacture of ready-made costumes for women.

#### BOOKS, PAPER, PRINTING, &C.

These industries give employment to 7,593 persons, who are mostly engaged in printing or bookbinding, for the number engaged in manufacturing was only 1,106, and by far the greater portion of these were employed in making paper bags or boxes. In the process of bookbinding and in the manufacture of paper boxes and bags, girls are largely employed, and their employment is increasing, for, in 1898, females represented 13 per cent. of the total hands, as against 22 per cent. in 1907. The details of each industry for the latter year were as follow:—

Industries.	Number of Establish- ments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
CLASS VIII.—BOOKS, PAPER, PRINTING, &C.					Months	£	No.	£
Electrotyping and Stereotyping...	4	40	...	40	12'00	3,384	9	7,139
Paper-making, Paper-boxes, Bags, &c. ... ..	25	468	640	1,106	11'94	54,500	635	78,261
Photo-engraving ... ..	13	140	20	160	12'00	11,346	2	9,949
Printing and Binding ... ..	323	5,255	1,032	6,287	11'93	568,653	862	671,922
Total ... ..	365	5,901	1,692	7,593	11'93	637,883	1,508	767,271

#### MUSICAL INSTRUMENTS.

There are twelve establishments engaged in the manufacture and repairing of musical instruments, and they employed 343 males and 37 females, who received wages amounting to £35,298. The machinery in use averaged 43 horse-power, and the value of the machinery and plant £6,292. The most important of the industries is piano-making, and instruments of a high class are now being turned out, wholly made in the State.

#### ARMS AND EXPLOSIVES.

The manufacture of small arms and ammunition is a matter of national importance, and has attracted the attention of the Commonwealth Government, but up to the present no works have been established. In New South Wales there are only three establishments engaged in the manufacture of explosives, and they employed 14 males and 2 females during 1907, and paid £1,220 in wages. The machinery in use averaged 4 horse-power, and the value of machinery and plant was £200.

## VEHICLES, SADDLERY, HARNESS, &amp;C.

The greater portion of the work done in these establishments is connected with the repair rather than the manufacture of vehicles; but there are many establishments where coaches and waggons are built throughout. With the extension of the railways and tramways, and the introduction of other improvements in the method of locomotion, this industry cannot be expected to show much further development. Nevertheless, with a gradual increase during the last five years, the hands employed in 1907 exceeded those employed in 1903 by 649. Other industries in this class, such as cycle-building, are growing in importance, and the whole group of industries employs 1,362 hands more than in 1903. The following table shows the operations of each industry during 1907:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
CLASS XI.—VEHICLES, SADDLERY, HARNESS, &c.								
Coach and Wagon Building ...	230	2,159	8	2,167	Months	£	No.	£
Cycles ... ..	28	353	8	361	11·80	152,623	182	41,610
Perambulators ... ..	3	55	4	59	11·77	25,624	25	8,197
Saddlery, Harness, and Whips ...	74	739	43	781	9·76	2,767	1	275
Spokes, &c. ... ..	10	96	...	96	11·76	56,216	...	5,580
					11·37	6,675	98	6,260
Total ... ..	345	3,402	62	3,464	11·75	243,910	306	61,922

## SHIP AND BOAT BUILDING AND REPAIRING, &amp;C.

The number of hands engaged in ship and boat building and repairing is decreasing of late years. So far as ship-building is concerned, there are signs of greater development than hitherto, for, in addition to wooden vessels, it has been shown that the manufacture of large iron vessels can be successfully carried out. At present, however, nearly all the ships built in the State are small wooden vessels for the river and island trades, or for passenger traffic between Sydney and its suburbs. In regard to boat-building, there is always considerable employment afforded in the Metropolitan district by the constant and increasing demand for yachts, motor-launches, and other pleasure craft, for which the harbour of Port Jackson is so eminently suited. In the docking of ships, there are considerably less hands employed than there were formerly, although additional accommodation has been provided, and there are now three of the largest graving docks in the world to be found at Sydney. The employment in this connection, however, is subject to great fluctuation, and at one period of the year there were 981 hands employed in dock-yards alone. The following table shows the details of each industry for 1907:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
CLASS XII.—SHIP AND BOAT BUILDING AND REPAIRING.					Months	£	No.	£
Docks and Slips ... ..	6	740	...	740	12 00	102,450	4,793	118,200
Sailmaking ... ..	5	25	...	25	12'00	1,747	2	295
Ship and Boat Building and Repairing... ..	25	939	1	940	11'90	111,568	486	44,698
Total ... ..	36	1,704	1	1,705	11'94	215,765	2,281	163,393

## FURNITURE, BEDDING, &amp;C.

Industries connected with the manufacture of furniture, bedding, &c., have increased greatly in importance since 1898, when only 1,549 hands were employed. The chief increase has been in furniture making, but it is a matter for regret that the industry is, to a large extent, in the hands of the Chinese. Of the 1,773 hands engaged in this industry during 1907, 759, or nearly 43 per cent. were Chinese. The particulars relating to each industry for the year 1907 are shown in the following table:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
CLASS XIII.—FURNITURE, BEDDING, &c.					Months	£	No.	£
Bedding, Flock, and Upholstery ...	21	264	116	380	11·90	29,861	106	6,911
Billiard Tables... ..	3	51	9	53	12·00	5,614	17	1,530
Chair-making ... ..	6	67	2	76	11·14	4,841	14	805
Furniture and Cabinet-making ...	94	1,763	10	1,773	11·60	137,489	220	21,035
Picture Frames ... ..	14	109	31	143	11·87	8,598	13	1,885
Window Blinds ... ..	6	55	1	56	11·78	3,388	16	1,530
Total ... ..	144	2,309	172	2,481	11·60	150,091	386	33,696

## DRUGS AND CHEMICALS AND BY-PRODUCTS.

There are several large establishments for the manufacture of drugs and chemicals, and one-fourth of the hands are females, who are principally engaged in packing or labelling the manufactured articles. The manufacture of by-products includes many articles such as baking powder, blue, blacking, &c., for domestic use, and the local article is gradually superseding imported goods. The following are the leading details in regards to each industry for the year 1907:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
CLASS XIV.—DRUGS AND CHEMICALS.					Months	£	No.	£
Baking Powder ... ..	12	73	72	145	12·00	8,797	50	4,580
Chemicals, Drugs, and Medicines..	23	416	203	619	11·68	46,893	246	97,447
Fertilisers ... ..	3	58	...	58	12·00	4,698	25	6,792
Paints and Varnishes, &c. ... ..	20	175	109	284	11·46	15,994	155	15,389
Total ... ..	58	722	384	1,106	11·68	76,382	476	124,208

## SURGICAL AND SCIENTIFIC APPLIANCES.

Most of the establishments herein are engaged in the manufacture of optical instruments, such as spectacles, &c. The total number of establishments was 8, in which 66 males and 18 females were engaged throughout the year, receiving £6,348 in wages. The average power of machinery in use was 2 horse-power, and the value of machinery and plant £2,760.

## TIMEPIECES, JEWELLERY, AND PLATED WARE.

While there are, as a matter of course, numerous small establishments where timepieces are repaired, there are but few of any kind in which the articles are actually manufactured, and these are included with those engaged in manufacturing jewellery:—

Industries.	Number of Establishments.	Average Number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
CLASS XVI.—TIMEPIECES, JEWELLERY, AND PLATED WARE.								
Electro-plating ... ..	8	114	4	118	Months 11-76	£ 8,158	No. 29	£ 5,727
Manufacturing Jewellery ... ..	38	452	56	508	11-95	40,390	.....	14,466
Total ... ..	46	566	60	626	11-91	48,548	29	20,193

## HEAT, LIGHT, AND POWER.

Establishments connected with the supply of heat, light, and power, show an increase each year, and the number of hands employed has been doubled within the last ten years:—

Industries.	Number of Establish- ments.	Average Number of Hands Employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery in use.	Value of Machinery, Plant, &c.
		Males.	Females.	Total.				
CLASS XVII.—HEAT, LIGHT, AND POWER.								
Coke-works ... ..	15	417	...	417	Months 11-52	£ 46,279	No. 610	£ 62,881
Electric Apparatus... ..	15	144	1	145	11-72	9,230	...	3,444
Electric Light and Power ... ..	91	633	1	634	11-78	79,985	32,550	1,109,535
Gas-works and Kerosene ... ..	42	744	...	744	12-00	99,101	1,074	631,856
Lamps and Fittings, &c....	2	19	61	80	12-00	4,400	6	1,500
Hydraulic Power ... ..	1	20	...	20	12-00	4,286	500	26,587
Total ... ..	166	1,977	63	2,040	11-82	243,281	34,740	1,835,803

The chief development herein has occurred in connection with the supply of electric power and light, principally owing to the establishment of the metropolitan tramway and electric lighting systems.

The value of the machinery used in furnishing electric power and light now exceeds the plant in gas-works by £501,700, and the engines have a capacity of 43,215 horse-power. The rapid progress of these establishments is shown by the following table:—

Year.	Electric Supply Works.	Hands Employed.	Plant and Machinery.	
			Power (full capacity).	Value.
	No.	No.	H. p.	£
1898	33	141	3,113	99,110
1899	33	147	2,779	129,027
1900	33	191	3,961	110,051
1901	53	340	12,447	282,842
1902	58	413	21,175	469,985
1903	73	434	21,994	528,587
1904	65	464	24,492	624,686
1905	67	521	31,862	778,313
1906	66	565	38,327	975,723
1907	91	634	43,215	1,109,535

Considerable progress has been made in the installation of electric lighting plants; nevertheless, the quantity of gas used is still increasing, and this notwithstanding the successful efforts made to economise its consumption without impairing its lighting utility. Although still chiefly used for lighting purposes, the use of gas is being steadily extended in connection with gas-engines and for cooking purposes. The following table shows particulars of the operations of gas-works during each of the last ten years. The value of plant does not include mains.

The rate charged to consumers varies in different country localities between 3s. per 1,000 feet in Bathurst and 15s. in Deniliquin. The price charged by the principal company to private consumers in Sydney and suburbs is at present 4s. per 1,000 feet.

Year.	Gas-works.	Hands Employed.	Gas made (as returned by manufacturers).	Plant and Machinery.	
				Power (full capacity).	Value.
	No.	No.	1,000 cubic feet.	H.-p.	£
1898	41	598	1,788,218	1,111	445,386
1899	38	587	1,883,002	1,076	426,145
1900	41	620	2,007,054	1,101	463,206
1901	38	650	2,138,631	1,065	480,533
1902	42	648	2,304,814	1,011	536,338
1903	39	716	2,487,807	1,001	542,775
1904	40	692	2,598,650	1,091	601,976
1905	43	663	2,683,396	1,057	598,047
1906	46	719	2,790,494	1,361	647,339
1907	40	679	3,044,756	1,273	607,856

During 1907 the quantity of coal used for gas was 247,436 tons, which, in addition to the gas, produced 140,820 tons of coke and 2,650,452 gallons of tar.

#### LEATHERWARE.

There are 241 males and 31 females employed in the manufacture of leatherware not elsewhere included, the majority of whom are engaged in making bags and portmanteaux. The employees in this class were busily engaged throughout the year, and received £16,805 as wages. The power of the machinery in average use was 58 horse-power, and the value of the machinery and plant was £5,999.

#### MINOR WARES.

Of the minor industries which cannot be classified under any of the preceding headings, the most important are broom and brush making, umbrella-making, and the manufacture of baskets, wicker-ware, and mats. The brooms are principally manufactured from millet grown in the State. An interesting feature of this industry is the employment which it affords to persons afflicted with blindness, and in 1907 there were 80 males and 10 females in the Sydney Industrial Blind Institution, who were employed

in the manufacture of brushes, baskets, mats, &c. The particulars of the different industries for the year 1907 were as follows:—

Industries.	Number of Establishments.	Average number of Hands employed.			Average time worked per hand.	Amount of Wages paid.	Average Horse-power of Machinery used.	Value of Plant, Machinery, &c.
		Males.	Females.	Total.				
CLASS XIX.—MINOR WARES.					Months	£	No.	£
Baskets and Wicker-ware, Matting, &c. ...	8	89	1	90	12-00	4,933	...	407
Brooms and Brushware ...	18	171	25	196	11-66	11,750	20	4,160
Rubber Goods ...	6	108	4	112	12-00	7,061	56	11,678
Toys ...	2	9	...	9	12-00	232	6	330
Umbrellas ...	5	57	93	150	12-00	8,497	1	1,537
Other Industries ...	12	93	59	152	12-00	8,346	9	2,932
Total ...	51	527	182	709	11-90	40,819	92	21,044

#### AVERAGE TIME WORKED PER HAND.

In the preceding tables the average time worked per hand has been shown for each class. Taking the classes as a whole, it will be found that each employee worked, on an average, for 11·43 months of the year. It is, of course, impossible to show the actual time worked by employees; but from the figures given it will be seen that many of the workers suffered no loss from broken time, the most unfortunate in this respect being those engaged in industries dealing with raw materials—the product of pastoral pursuits.

#### WAGES.

The wages paid to employees in factories amounted in 1907 to £6,650,715, equal to £127,900 per week; so that their enforced idleness during part of the year caused a loss of about £331,600 to the workers.

It is impossible from the bare statements of wages supplied in these returns to give an approximation of the average wages of the workers. Simply to state the average wages of the whole body or any particular industry from the information contained herein would be absolutely misleading, as there are so many matters which have a direct bearing on the subject. The ages of the workers, the quantity of skilled and unskilled labour, the relative employment of males and females, the length of time worked by each class of workers, are all matters of vital importance in ascertaining the fair average wage paid, and these details are not available.

Under the provisions of the Factories and Shops Act, however, information is collected regarding the wages paid in factories which come within its operations. The subject is too comprehensive to be dealt with in this volume; but complete information concerning it will be found in the "Statistical Register," which is published each year.

#### POWER AND VALUE OF MACHINERY AND PLANT.

New South Wales has few running streams so situated as to be available for the purpose of driving machinery for manufacturing purposes, and nearly the whole of the power used is, therefore, derived from steam; but in some instances, chiefly in the metropolis, gas is employed. Other power is used only to a limited extent, and although electric engines of 14,951 horse-power are shown in the following table, they are almost solely used for lighting or motive purposes, and, in addition, their power is usually dependent upon some other class of engine for its development.

In the table given below the number of establishments using machinery is shown, with the aggregate horse-power. By the term "full capacity" is understood the power capable of being generated by the boilers or machinery, while the "average used" represents the power generally used in carrying on the processes of manufacture:—

Class of Industry.	Value of Machinery, Implements, Tools, and Conveyance Plant.	Number of Establishments using Machinery.	Horse-power of Machinery in use.											
			Full Capacity.						Average used.					
			Steam.	Gas.	Electricity.	Water.	Oil.	Turbine.	Steam.	Gas.	Electricity.	Water.	Oil.	Turbine.
Treating Raw Materials, Product of Pastoral Pursuits, &c....	261,074	264	4,008	303	33	24	26	...	2,889	219	23	20	22	...
Oils and Fats, Animal, Vegetable, &c....	153,923	24	516	2	201	...	...	...	380	1	127	...	...	...
Processes in Stone, Clay, Glass, &c. ....	426,840	100	6,497	219	665	...	20	...	4,106	176	457	...	20	...
Working in Wood	436,816	493	8,442	463	1,283	38	30	...	6,560	355	692	30	29	...
Metal Works, Machinery, &c. ....	1,850,946	338	12,411	1,212	4,843	...	162	...	9,731	886	3,970	...	107	...
Connected with Food and Drink, &c. ....	2,553,063	649	18,038	676	1,260	6	174	55	13,691	518	839	3	122	52
Clothing and Textile Fabrics, and Materials	313,329	211	805	1,155	389	...	10	...	609	834	338	...	8	...
Books, Paper, Printing, and Engraving	767,271	253	828	1,107	1,259	6	56	...	588	881	993	2	37	...
Musical Instruments	6,292	5	41	4	11	...	...	...	41	2	6	...	...	...
Arms and Explosives	200	1	4	...	...	...	...	...	4	...	...	...	...	...
Vehicles and Fittings, Saddlery and Harness, &c. ....	61,922	76	287	105	61	...	39	...	204	71	50	...	31	...
Ship and Boat Building, &c. ....	163,393	24	2,849	33	361	...	...	...	2,248	33	157	...	...	...
Furniture, Bedding, and Upholstery	33,696	59	277	166	146	...	7	...	253	129	116	...	4	...
Drugs, Chemicals, and By-products	124,208	40	424	192	168	...	20	...	322	139	123	...	15	...
Surgical and other Scientific Instruments	2,760	6	...	2	7	...	...	...	...	2	6	...	...	...
Jewellery, Timepieces, and Plated Ware	20,193	23	...	43	90	...	...	...	...	29	76	...	...	...
Heat, Light, and Power	1,835,803	153	34,883	837	4,123	61	48	10,465	24,934	546	2,087	46	24	9,190
Leatherware, N.E.I.	5,999	11	12	56	6	...	6	...	8	44	6	...	6	...
Minor Wares, N.E.I.	21,044	31	54	49	40	...	4	...	52	36	26	...	4	...
Total	9,043,772	2,761	90,376	6,624	14,951	135	602	10,520	66,620	4,901	10,072	101	429	9,242

Some explanation is necessary in connection with these figures. Although electrical power is shown in the table just given, it is excluded from consideration in the figures quoted in this chapter, as it is usually dependent on steam-engines for its development, and the power has already been credited to their agency. The value of machinery and plant includes not only the machinery and engines of which the horse-power is shown, but also all other tools and implements used in the various processes of manufacture, as well as the conveyance plant. The most powerful machinery is used in the supply of heat, light, and power, in the manufacture of metals, and in the preparation of foods and drinks, while in the clothing industries machinery enters into use only to a minor degree.

The power of machinery in average use increased from 32,968 horse-power in 1898 to 81,293 horse-power in 1907, while the value of the machinery and plant in these years was £5,435,696 and £9,043,772 respectively; so that in this respect alone there is now an additional investment of capital to the extent of over £3,600,000.

## CAPITAL INVESTED.

The capital invested in the manufacturing industry may be divided into two classes, fixed capital and active capital. Fixed capital represents the amount invested in lands, buildings, machinery and plant, tools and implements of trade, and good-will. Active capital includes the value of raw material and fuel on hand, stock in process of manufacture, finished products on hand, bills receivable, ledger accounts, cash in hand, and sundries not elsewhere included. The approximate amount of fixed capital can be readily ascertained, for the value of land and buildings occupied for manufacturing purposes, as well as the value of machinery and plant, implements and tools of trade, is obtained each year. Concerning the active capital no particulars are collected, and there are little or no data from which an estimate may be prepared.

The value of land and buildings in 1907 was £6,751,500, and of machinery, plant, &c., £9,043,800, so that the fixed capital amounted to £15,795,300.

The value of the land and buildings, machinery and plant, &c., in each industry is shown in the following table, which also contains some interesting information for the year 1907 regarding the value of materials used, and the value of goods manufactured or work done:—

Class of Industry.	Value of—						
	Lands, Buildings, and Fixtures. (1901 figures.)	Machinery, Implements, and Conveyance Plant.	Rent Paid.	Materials used.	Fuel consumed.	Wages and Salaries paid.	Goods Manufactured or Work Done.
Treating Raw Materials, product of Pastoral pursuits, &c. ....	£ 255,249	£ 261,074	£ 2,435	£ 3,925,883	£ 26,309	£ 242,761	£ 4,507,210
Oils and Fats, Animal, Vegetable, &c. ....	140,045	158,923	752	467,451	7,722	45,658	686,894
Processes in Stone, Clay, Glass, &c. ....	352,118	426,840	2,673	167,982	98,418	306,927	827,680
Working in Wood ....	331,809	436,816	3,681	1,271,115	9,962	466,832	2,082,130
Metal Works, Machinery, &c. ....	1,426,424	1,850,946	14,042	5,219,699	354,896	1,884,144	9,160,698
Connected with Food, Drink, &c. ....	1,743,608	2,553,063	17,952	7,940,529	110,569	898,637	10,623,601
Clothing and Textile Fabrics and Materials. ....	345,509	313,329	63,705	2,073,711	18,217	1,049,406	3,808,917
Books, Paper, Printing, and Engraving ....	316,381	767,271	31,063	536,055	19,570	637,883	1,627,489
Musical Instruments ....	14,200	6,292	390	52,910	299	35,298	118,951
Arms and Explosives ....	554	200	150	3,634	10	1,220	5,264
Vehicles and Fittings, Saddlery, Harness, &c. ....	185,708	61,922	11,966	290,931	7,117	243,910	690,084
Ship and Boat Building, &c. ....	550,190	163,393	850	110,807	7,147	215,765	396,584
Furniture, Bedding, and Upholstery ....	71,910	33,696	9,822	294,832	2,570	190,091	598,412
Drugs, Chemicals, and By-products ....	90,369	124,208	3,258	320,817	7,381	76,382	595,078
Surgical and other Scientific Instruments ....	...	2,760	818	5,689	83	6,348	19,675
Jewellery, Timepieces, and Plated Ware ....	3,800	20,123	4,009	65,652	1,008	48,548	146,043
Heat, Light, and Power ....	884,335	1,835,803	1,699	299,995	153,324	243,281	1,373,709
Leatherware, N.E.L. ....	15,084	5,999	301	75,214	431	16,805	107,947
Minor Wares, N.E.L. ....	26,230	21,044	2,724	120,910	1,464	40,819	194,750
Total ... ..	6,751,523	9,043,772	172,296	23,263,766	826,468	6,650,715	37,571,116

\* If property of occupier. † Including value of wool treated.

## VALUE OF PRODUCTION FROM MANUFACTORIES.

In stating the value of production from manufactories, the returns from factories dealing with milk products are not taken into consideration, as they have already been included in the value of production from the dairying industry.

The value of goods manufactured or work done in 1907 amounted to £37,571,116. Of this amount, £24,090,264 represents the value of materials and fuel used, leaving a balance of £13,480,852—the value added by the processes of treatment, which is the real value of production from manufactories. The sum last mentioned includes wages to the amount of £6,650,715, so that the actual amount which accrued to the proprietors was £6,830,137. It is interesting to note the proportions of the total output which the various items represent, and they are, therefore, shown in the following table:—

Item.	Amount.	Proportion of total.
	£	per cent.
Value of materials used ... ..	23,263,766	61·9
Value of fuel used ... ..	826,498	2·2
Wages paid ... ..	6,650,715	17·7
Balance which accrued to proprietors ... ..	6,830,137	18·2
Value of goods manufactured or work done ...	37,571,116	100·0

From this it will be seen that out of every hundred pounds worth of goods produced in factories, materials and fuel used in the manufacture thereof represented about £64, while the employees received between £17 and £18, and the proprietors £18. There are, of course, numerous other sources of expense, in addition to those quoted above, and the balance shown as accruing to proprietors by no means represents the actual profits. A considerable margin must be allowed for such items as renewal of, and depreciation in, plant and machinery, &c., insurance, rent (where the buildings are not owned by the manufacturers), advertising, rates, taxes other than duty or income tax, and, in addition, a sum to cover the interest on invested capital; the balance being the actual reward of the manufacturers' exertions.

Pursuing the investigation still further, it will be seen from the following table that the proportions of the items vary considerably in the different classes of industries:—

Class of Industry.	Proportionate Value of Manufactured Goods represented by—			
	Materials.	Fuel.	Wages.	Balance Accruing to Proprietors.
Treating Raw Materials, Product of Pastoral Pursuits, &c. ....	per cent. 87·10	per cent. ·58	per cent. 5·39	per cent. 6·93
Oils and Fats, &c. ....	70·97	1·12	6·65	21·26
Processes in Stone, Clay, Glass, &c. ....	20·30	11·89	37·08	30·73
Working in Wood ... ..	61·05	·48	22·42	16·05
Metal Works, Machinery, &c. ....	56·98	3·88	20·56	18·58
Connected with Food and Drink, &c. ....	74·74	1·04	8·46	15·76
Clothing and Textile Fabrics, &c. ....	54·44	·48	27·56	17·52
Books, Paper, Printing, and Engraving ... ..	32·94	1·20	39·19	26·67
Musical Instruments, &c. ....	44·48	·25	29·68	25·59
Arms and Explosives ... ..	69·03	·19	23·18	7·60
Vehicles, Saddlery, and Harness, &c. ....	42·16	1·03	35·34	21·47
Ship and Boat Building, Repairing, &c. ....	27·94	1·80	54·41	15·85
Furniture, Bedding, Upholstery, &c. ....	49·27	·43	31·76	18·54
Drugs, Chemicals, and By-products ... ..	53·91	1·24	12·84	32·01
Surgical and other Scientific Instruments ... ..	28·91	·42	32·27	38·40
Timepieces, Jewellery, and Plated Ware ... ..	44·96	·69	33·24	21·11
Heat, Light, and Power ... ..	21·84	11·16	17·71	49·29
Leatherware, N.E.I. ....	69·68	·40	15·57	14·35
Minor Wares, N.E.I. ....	62·09	·75	20·96	16·20
	61·92	2·20	17·70	18·18

The table discloses some curious results, and shows that so far as two classes of industries were concerned—those engaged in treating raw pastoral products, and in the manufacture of arms and explosives—the year's operations could hardly have been profitable to the proprietors. As regards the first-mentioned industry, however, the receipts from the sale of by-products might reasonably be expected to increase the profits.

It is interesting to note the extent to which the value of materials is added to by the processes of treatment. For all industries, materials averaged 62 per cent. of the value of the output; but there was great diversity amongst the various classes, and the proportion ranged from 20 per cent. in those industries engaged in processes in stone, clay, glass, &c., to 87 per cent. in those treating raw pastoral products. These variations can be easily understood when the wide difference between the operations of the industries is considered, and the value of the plant employed is taken into account. The extensive use of machinery, however, is not always the chief factor controlling the value added to materials, and the industries dealing with food, &c., and those engaged in shipbuilding, &c., may be cited as an example. In the former class, materials represent 75 per cent. and wages only 8 per cent. of the total value, while in the latter class, the wages amount to almost twice the value of the materials used and represent 54 per cent. of the total cost.

The most striking example of the difference between hand and machine work is, however, afforded by the clothing industries. In establishments dealing with the slop-clothing the materials represented 55 per cent. of the value of the output, and wages only 27 per cent.; but in tailoring establishments, where the sewing is principally done by hand, the materials represented 41 per cent. and wages 34 per cent. of the value of the finished article. The general conclusion to be arrived at from the figures would appear to be that the quantity of skilled labour required in the manufacture of an article is the greatest factor in adding to the value of raw material.

The following statement shows the progress of manufactories as regards value of production and wages paid in each year since 1901, except 1902, for which the information is not available:—

Year.	Value of—					Wages paid.
	Materials used.	Fuel consumed.	Goods manufactured, or work done.	Production, being value added to raw materials.	Production per head.	
	£	£	£	£	£ s. d.	£
1901	12,597,982	482,428	22,820,839	9,740,429	7 2 5	4,945,079
1903	15,121,891	*	24,721,681	9,599,790	6 15 3	4,839,557
1904	14,860,008	515,544	25,283,320	9,907,768	6 17 0	5,012,758
1905	16,662,775	556,660	27,850,158	10,630,723	7 3 9	5,191,350
1906	19,924,225	593,935	32,424,251	11,906,091	7 17 3	5,591,888
1907	23,263,766	826,498	37,571,116	13,480,852	8 13 5	6,650,715

\* Not collected.

As stated previously, from the value of production has been excluded the value added to articles already included in the dairying industry.

The production from manufactories in 1907 represented a value of £8 13s. 5d. per head of population, an amount 16s. in excess of the return for 1906, which was higher than in any previous year.

## EMPLOYMENT AND ARBITRATION.

A FAIR approximation of the number of persons engaged in various occupations is obtainable only at the Census, and the particulars then obtained are not wholly satisfactory, as in many cases the number engaged in any particular industry cannot be ascertained owing to the vagueness of the replies. It is important that the occupations should be classified in as simple and systematic a manner as possible. The classification adopted in New South Wales and throughout Australasia generally was drawn up for the Census of 1891, and adopted with a few minor modifications for use at the Census of 1901.

By this method the people are divided into eight great classes, and these again into orders and sub-orders, according to the strict canons of scientific classification. The first seven classes include all breadwinners, and the eighth all dependents. The three great branches of workers are separated thus—all producers of raw materials, whether agricultural, pastoral, fishing, forest, or mining come together naturally in Class VI; all modifiers or makers in Class V; all distributors and sellers and transporters in Classes III and IV. Class I, which is called the Professional, includes those ministering to General and Local Government, Defence, Law and Order, to Religion, Charity, Education, Art, Science, and Amusement. All persons employed by the General and Local Government, whose occupations properly belong to the Producing, Industrial, or Commercial Classes, are included therewith, as the value of the classification is evidently the knowledge as to *how* these persons are employed, and not *by whom*. Class II, the Domestic, includes all persons supplying board and lodging, and performing domestic duties for which remuneration is paid. The classes may be briefly defined as follows:—

### SECTION A.—BREADWINNERS.

Class.

I.—Professional.

II.—Domestic.

III.—Commercial.

IV.—Transport and Communication.

V.—Industrial.

VI.—Agricultural, Pastoral, Mineral, and other Primary Producers.

VII.—Indefinite.

### SECTION B.—DEPENDENTS—NON-BREADWINNERS.

VIII.—Dependents.

The main object of the classification is to obtain the total number of workers in any capacity whatever in any particular industry or business, not only those directly related to the industry or business, but those holding subordinate positions who assist in its conduct, and who would not otherwise be in the same sub-order as the principal workers.

The population distributed into the classes described above, and the proportion per cent. in each at the Census of 1901 were as follows:—

Classes.	Number.			Proportion per cent.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
I.—Professional ... ..	26,855	14,529	41,384	3·79	2·26	3·06
II.—Domestic ... ..	20,128	52,690	72,818	2·84	8·17	5·39
III.—Commercial ... ..	67,097	10,567	77,664	9·48	1·64	5·74
IV.—Transport and Communica- tion.	42,822	1,045	43,867	6·05	·16	3·24
V.—Industrial ... ..	122,692	23,996	146,688	17·33	3·72	10·85
VI.—Primary Producers ...	168,212	4,642	172,854	23·75	·72	12·78
VII.—Indefinite ... ..	3,597	5,927	9,524	·51	·92	·70
Breadwinners ... ..	451,403	113,396	564,799	63·75	17·59	41·76
VIII.—Dependents ... ..	256,634	531,164	787,798	36·25	82·41	58·24
Occupation not stated ...	1,968	281	2,249	...	...	...
Total Population ... ..	710,005	644,841	1,354,846	100·00	100·00	100·00

It will be seen that the Dependents, both male and female, comprise the largest class, owing to the fact that children are included therein. Of the males following gainful pursuits, the greatest number are employed in primary pursuits, which comprise 23·75 per cent. of the population, those engaged in the Industrial Class, 17·33 per cent., come next, and then those in the Commercial Class, 9·48 per cent.

Of those in the Industrial Class over 27,000 are general labourers. Among females by far the largest proportion is in the Domestic Class; next comes the Industrial Class, which includes over 18,000 dressmakers and tailoresses.

#### BREADWINNERS AND DEPENDENTS.

The population of a country falls naturally into the two broad divisions, breadwinners and dependents, and from the above table it will be observed that at the Census of 1901, 564,799, or 41·76 per cent., of the population were breadwinners, and 787,798, or 58·24 per cent., were dependents. The proportions, however, differed widely in the two sexes, only 17·59 per cent. of the females being breadwinners, as against 63·75 per cent. of the males.

The term "dependent" is not altogether apposite, because under this designation are included married women and others who perform domestic duties; nevertheless it is justified on the ground that for such services no money-wages are paid. The dependents are divisible into four subdivisions, viz.:—(a) Persons employed in household duties without receiving wages;—of these there were 282,718 females, and only 128 males; (b) persons of tender years unable to earn their own livelihood;—of these there were 145,965 males and 145,441 females; (c) relatives and others not performing household duties;—of these there were 99,736 males and 97,336 females; and (d) persons dependent on charity, or under legal detention;—of these there were 10,805 males and 5,669 females. The persons performing household duties without receiving wages were chiefly the wives and daughters of breadwinners. The relatives and others not performing household duties were aged persons, the parents or grandparents of the breadwinners; and children beyond the school age. Under this last category were also included all persons under 20 years of age whose occupation was not returned.

Grouped in the two great divisions of breadwinners and dependents, and excluding those whose occupation was not recorded, the proportion of population in each class at each Census from 1861 to 1901 appeared as follows:—

Census Years.	Breadwinners.			Dependents.		
	Males.	Females.	Total.	Males.	Females.	Total.
1861	67.58	19.07	46.46	32.42	80.93	53.54
1871	63.19	16.01	41.67	36.81	83.99	58.33
1881	64.37	16.29	42.61	35.63	83.71	57.39
1891	63.13	17.36	42.09	36.87	82.64	57.91
1901	63.75	17.59	41.76	36.25	82.41	58.24

These figures show very little change in the division of the population. In 1861 the high proportion of breadwinners was due to the small number of young persons. In the later years the greater proportion of dependents was largely due to the increased number of the aged.

#### PRIMARY PRODUCERS.

It has already been observed that the largest part of the population is employed in primary pursuits. The following statement shows the various branches of primary industries followed at the Census of 1901. For comparative purposes, the Census figures of 1891 are also shown, that being the first year when reliable particulars relating to occupations were obtained:—

Engaged in	1891.		1901.	
	Males.	Females.	Males.	Females.
Agriculture ....	66,483	7,022	75,884	1,735
Pastoral Pursuits ....	27,212	334	31,312	595
Dairying ... ..	4,996	4,758	15,850	2,285
Mining ... ..	30,936	1	38,378	4
Forests ... ..	1,653	.....	2,431	1
Fisheries ... ..	793	.....	1,238	3
Other Primary Pursuits.	2,773	3	3,119	19
Total ... ..	134,846	12,118	168,212	4,642

Agriculture claims the largest number of followers; then mining, pastoral, and dairying pursuits. The rural industries are the most important to any State, and the following statement shows at each Census from 1871 to 1901 the number and proportion of the whole population engaged in primary pursuits:—

Census.	Number.			Proportion of whole Population.
	Males.	Females.	Total.	
1871	81,431	8,027	89,458	Per cent.
1881	96,091	8,905	104,996	17.95
1891	134,846	12,118	146,964	14.09
1901	168,212	4,642	172,854	13.11
				12.78

It will be seen that the decrease in the proportion from 1891 to 1901 was due to the decrease in the number of females employed. The number of women engaged in agricultural and dairying pursuits varies with the time of the year. Besides the 1,735 women shown as employed in agriculture at the Census of 1901, there were some 2,500 others employed partly in connection with agriculture, and partly in domestic duties. The majority of these were relatives of the farmers, and appear in the classification as engaged in domestic duties, and therefore as dependents. Similarly, some 10,000 women who were engaged partly in dairying and partly in domestic duties are classified as performing domestic duties. If the women partly employed in agriculture and dairying be included with those mainly so employed, the total women engaged in agriculture would be 4,267, and in dairying 12,156.

#### THE INDUSTRIAL CLASS.

The persons engaged in industrial pursuits numbered 146,688, and of this number 94,119 were employed in manufacturing. The following table shows the numbers employed in the different branches of industry, and for purposes of comparison similar information is given for the year 1891:—

Engaged in—	1891.		1901.	
	Males.	Females.	Males.	Females.
Manufacture of Art and Mechanic Productions .....	23,108	623	26,346	1,157
Manufacture of Textile Fabrics, Dress, and Fibrous Materials ... ..	7,709	16,892	9,451	21,644
Manufacture of Food, Drinks, Narcotics, and Stimulants ... ..	7,699	240	11,638	875
Manufacture, &c., of Animal and Vegetable Substances ... ..	5,193	7	5,546	50
Manufacture, &c., relating to Metals and Mineral Matters ... ..	12,032	8	15,336	60
Working in Fuel, Light, and other forms of Energy	1,639	.....	2,012	4
Construction or repair of Buildings, Roads, Railways, &c. ... ..	37,590	2	36,898	11
Disposal of the Dead or of Refuse ... ..	386	5	1,278	15
Industrial Workers imperfectly defined ... ..	23,642	42	14,187	180
Total, Industrial Class ... ..	118,998	17,819	122,692	23,996

The largest number in the industrial class is employed in the construction or repair of buildings, railways, &c. Of the males in the manufacturing branches, the number engaged in art and mechanic productions is the largest; this order includes 5,432 working in engineering and iron works, 4,641 in books and printing, and 4,206 in building materials and other manufactures of timber. Practically all the females are engaged in the manufacture of textile fabrics, dress and fibrous materials, although a small number is employed in connection with book-binding and printing.

## THE COMMERCIAL CLASS.

The persons engaged in commercial callings numbered 77,664, of whom 66,299 were engaged in trade. The persons engaged in the various branches of trade at the Census of 1891 and 1901 are shown below:—

Dealing in—	1891.		1901.	
	Males.	Females.	Males.	Females.
Art and Mechanic Productions ... ..	2,602	226	4,144	564
Textile Fabrics and Dress and Fibrous Materials...	4,965	857	6,957	2,269
Food, Drinks, Narcotics, and Stimulants ...	12,720	1,066	19,522	2,581
Animals, and Animal and Vegetable Substances ...	3,313	59	5,984	154
Coal and other substances mainly used for Fuel and Light ... ..	1,339	10	2,084	25
Minerals other than for Fuel and Light ... ..	1,503	26	2,136	60
Mercantile Pursuits not elsewhere classed...	16,587	1,887	16,689	3,130
Total engaged in Trade ... ..	43,029	4,131	57,516	8,783

The sale of food, drink, &c., gives employment to most persons in this class, and the increase from 1891 to 1901 among those so employed was large. Those dealing in textile fabrics, &c., chiefly drapers, came next, and then those dealing in animal and vegetable substances. The other groups are comparatively small. The last group includes many persons who were so imperfectly defined that they could not be classed elsewhere.

The persons engaged in all branches of commerce were as follows:—

Engaged in—	1891.		1901.	
	Males.	Females.	Males.	Females.
Finance and Property ... ..	7,262	650	8,985	1,783
Trade ... ..	43,029	4,131	57,516	8,783
Chance Events ... ..	233	.....	424	.....
Storage ... ..	313	1	172	1
Total, Commercial Class ... ..	50,837	4,782	67,097	10,567

## TRANSPORT AND COMMUNICATION.

This class embraces all persons engaged in the transport of passengers or goods, or in effecting communication. The number so employed in 1891 and 1901 was as follows:—

Engaged in—	1891.		1901.	
	Males.	Females.	Males.	Females.
Railway Traffic (not construction) ... ..	7,114	143	9,493	238
Road Traffic (including Tramways) ... ..	12,256	24	13,050	56
Sea and River Traffic and the regulation thereof ...	10,456	57	15,318	107
Postal Service ... ..	1,875	253	2,644	517
Telegraph and Telephone Service ... ..	1,598	22	1,789	127
Delivery of Documents, Parcels, and Messages by hand ... ..	909	1	528	.....
Total, Transport and Communication ... ..	34,208	500	42,822	1,045

The persons engaged in railway and tramway traffic are practically all Government employees, as private railways only employed 218 men in 1901. The number included in the second group, as working in connection with tramways, in 1901, was 2,226. Among those engaged in sea and river traffic in 1901 were 4,929 wharf labourers.

#### THE DOMESTIC CLASS.

The Domestic Class embraces all persons employed in the supply of board and lodging, and in rendering personal services for which remuneration is usually paid. The numbers in each branch in 1891 and 1901 were as follows:—

Engaged in—	1891.		1901.	
	Males.	Females.	Males.	Females.
Supply of Board and Lodging... ..	7,777	10,132	8,258	15,622
Domestic Service and attendance (for which remuneration is paid) ... ..	9,927	28,117	11,870	37,068
Total, Domestic Class ... ..	17,704	38,249	20,128	52,690

This class comprises the largest number of females, and includes nearly one-half the total number of female breadwinners. Among those engaged in the supply of board and lodging in 1901 were 15,326 hotelkeepers and servants, and 6,088 boarding-house keepers and servants. The second group included 33,904 house servants and 4,043 laundry workers and washerwomen.

#### THE PROFESSIONAL CLASS.

The persons in this class comprise those engaged in the Government and defence of the country, and in satisfying the moral, intellectual, and social wants of its inhabitants. The numbers engaged in these directions at the Census of 1891 and 1901 were as follows:—

Engaged in—	1891.		1901.	
	Males.	Females.	Males.	Females.
General Government ... ..	1,185	6	1,545	31
Local Government... ..	265	7	349	5
Defence ... ..	1,237	.....	3,511	.....
Law and Order ... ..	4,564	84	5,404	74
Religion, Charity, Health ... ..	4,015	3,027	5,580	4,817
Education, Art, Science ... ..	9,920	7,293	10,466	9,602
Total, Professional Class ... ..	21,186	10,417	26,855	14,529

It should be pointed out that the number shown as employed by the General Government does not represent the whole number in its service. As explained previously, the principle of the classification is to include Government employees in the orders to which they are most nearly related. The total number of those in the Government service in 1901 was about 32,000.

A very general idea may be obtained from the preceding pages of the changes which have taken place, in the direction of labour, during the ten years from 1891 to 1901. But a better idea, perhaps, of the way in which labour has moved will be obtained from the following statement, which

shows at the two periods mentioned the proportion of males per 1,000 breadwinners, following each of the specified occupations, which are those employing most men in New South Wales:—

Occupation.	Males per 1,000 Breadwinners.	
	1891.	1901.
Supply of board and lodging ... ..	20	18
Domestic service and attendance ... ..	26	26
Engaged in finance and property ... ..	19	20
Dealers in textile fabrics, dress, &c. ... ..	13	15
Dealers in food, drinks, narcotics, &c. ... ..	33	43
Makers of art and mechanic productions ... ..	60	58
Makers of textile fabrics, dress, &c. ... ..	20	21
Makers of food, drinks, narcotics, &c. ... ..	20	26
Workers in metals and minerals ... ..	31	34
Construction of houses and buildings ... ..	62	52
Agricultural pursuits ... ..	174	168
Pastoral pursuits ... ..	71	69
Dairying pursuits ... ..	13	35
Mining pursuits ... ..	81	85

The above table shows that the number of males working in connection with food, drinks, &c., both as makers and sellers increased largely, and that in conjunction therewith the number of those engaged in dairy-farming also greatly extended. The number of workers in metals and minerals increased slightly, but those engaged in agricultural and pastoral pursuits, and in the building trades, declined.

#### GRADES OF OCCUPATIONS.

For purposes of comparison, and in order to distinguish the masters from the men, breadwinners were divided into five grades, viz.:—(a) Employers of outside labour; (b) persons engaged on their own account, but not employing others for salary or wages; (c) relatives assisting in a business, but not receiving salary or wages who, nevertheless, are breadwinners; (d) wage-earners; and (e) unemployed. It was, however, found necessary to record those to whom the grade in the Census schedule was not applicable, besides those who neglected to state whether they were employed or not.

The total number of the people in 1901, classified according to these grades, was as follows:—

Grade.	Males.	Females.	Persons.
Employers ... ..	48,920	4,933	53,853
Persons working on their own account ... ..	65,577	16,780	82,357
Relatives assisting ... ..	17,635	6,077	23,712
Wage-earners ... ..	290,203	72,190	362,393
Persons to whom classification according to grade does not apply ... ..	264,910	540,911	805,821
Unemployed ... ..	21,110	3,639	24,749
Not specified ... ..	1,650	311	1,961
Total ... ..	710,005	644,841	1,354,846

The employers, which term does not include mistresses of domestic servants, numbered 53,853. Wage-earners comprised 362,393 persons, and if from these be deducted those engaged in purely domestic service,

Government employees, and the naval and military members of the community, it will be found that there must have been a large number of small employers. The average ratio of employers to workers was about 1 to 6.

The persons working on their own account were exceedingly numerous, comprising 82,357, and were especially so among the farming classes and among those following commercial pursuits and engaged in transport. The relatives returned as assisting do not form a very numerous class. They are found engaged mainly in agricultural and pastoral pursuits. The unemployed numbered 24,749, or about  $4\frac{1}{2}$  per cent. of total breadwinners. At the Census a person was directed to return himself as unemployed if he had been out of work for more than a week immediately prior to the Census—cases of leave of absence were excepted. Of the unemployed males, 2,753 were out of work through sickness, and 1,656 through old age, while the remaining 16,701 could not be placed under either of these heads.

The proportion per cent. of breadwinners of each sex belonging to each grade in 1901 was as shown below. The proportions in 1891, the first year in which this information was obtained, are also shown:—

Grade.	1891.		1901.	
	Males.	Females.	Males.	Females.
Employer ... ..	14.0	3.0	10.9	4.3
Engaged on own account ... ..	13.0	15.8	14.5	14.8
Relative assisting... ..	2.3	8.4	3.9	5.4
Wage-earner ... ..	64.2	61.3	64.3	63.7
Not applicable ... ..	1.7	8.4	1.8	8.6
Unemployed ... ..	4.8	3.1	4.6	3.2
Total ... ..	100.0	100.0	100.0	100.0

#### AGES OF WORKERS.

The chief interest attaching to the record of the ages of the workers is the light it throws upon the employment of young persons. Of the male breadwinners rather less than one-sixth were under the age of 20 years; while of the female breadwinners about one-fourth were under that age. Of the whole population under 20, more than four-fifths were dependents. The following table gives the number of breadwinners of each sex in various age-groups, their proportion per cent. to the total number in each group, and the proportion of each group to the total number of breadwinners:—

Age-groups.	Number of Breadwinners.		Proportion per cent. of total in each group.		Proportion per cent. of total Breadwinners.	
	Males.	Females.	Males.	Females.	Males.	Females.
Under 15 ... ..	9,142	2,785	3.72	1.16	2.03	2.46
15—19 ... ..	61,963	26,381	87.99	37.29	13.80	23.30
20—24 ... ..	61,268	24,784	98.64	38.26	13.64	21.89
25—44 ... ..	202,152	38,740	98.39	21.81	45.02	34.22
45—64 ... ..	92,076	15,358	97.42	21.67	20.50	13.56
65 and over ... ..	22,496	5,181	84.07	26.57	5.01	4.57
Not stated ... ..	2,306	167	.....	.....	.....	.....
Total ... ..	451,403	113,396	63.75	17.59	100.00	100.00

Under the age of 15, less than 4 per cent. of males and about 1 per cent. of females are breadwinners. Between 15 and 20 the number of workers increases rapidly. Between 20 and 25 the largest proportion of breadwinners in both sexes is found. Among males the proportion of breadwinners does not vary greatly between 20 and 65, but after 65 the number of breadwinners falls away. The largest proportions of female breadwinners are between 15 and 25. After 25 more women are married and the proportion decreases. The increase in the number of female breadwinners after 65 is more apparent than real, being due to the large number, probably widows, included therein who are proprietors of houses and land or are of independent means.

The statement below shows for males the proportion per 1,000 in each age-group who were dependents or breadwinners, the latter being divided into primary producers, industrial workers, and all others :—

Age-group.	Breadwinners (Males).				Dependents.
	Primary Producers.	Industrial Workers.	All Others.	Total.	
Under 15 ... ..	16	9	12	37	963
15—19 ... ..	338	260	282	880	120
20—24 ... ..	365	268	353	986	14
25—44 ... ..	345	273	366	984	16
45—64 ... ..	384	262	328	974	26
65 and over ... ..	378	172	290	840	160
All ages ... ..	238	173	227	638	362

The proportion of primary producers is about the same at all ages from 15 to 65. Among industrial workers and all others a maximum is reached between 25 and 45. The smallest proportion of industrial workers is at ages 65 and over, and of other workers at the extreme ages from 15 to 20 and over 65. The lowest proportion of dependents is at ages between 20 and 25, after which it rises slowly to age 65, and then increases largely.

The next statement shows the proportion of females per 1,000 in each age-group who are dependents and breadwinners, the latter being divided into those in the domestic class, and all others :—

Age-group.	Breadwinners (Females).			Dependents.
	Domestic Class.	All Others.	Total.	
Under 15 ... ..	8	4	12	988
15—19 ... ..	191	182	373	627
20—24 ... ..	197	186	383	617
25—44 ... ..	101	117	218	782
45—64 ... ..	80	137	217	783
65 and over ... ..	47	219	266	734
All ages ... ..	82	94	176	824

At ages from 15 to 25, women in the domestic class are more numerous than all other workers put together, and from 25 to 45 the difference is not great. After 45 the number of domestics falls away largely. The proportion of dependents is at a minimum at ages between 20 and 25, after which it increases up to age 65, and then declines.

## WAGES.

The "Wealth and Progress of New South Wales" for 1897-8 contains an account of the industrial progress of the State from the earliest period to which the records extend up to 1897. As this information is readily accessible, and no new facts have been discovered bearing upon the subject treated, the reader is referred to that work. It will, however, be well to record the variation of wages from the year 1893.

The period from 1880 to 1887 was, perhaps, the brightest in the State, as at no period, except in the five golden years, 1853-57, were wages so high, and at no period was the purchasing power of money so great. Up to the end of 1891 there was little reduction in the nominal rate of wages in skilled trades, though for unskilled labour the rates experienced a decided decline. In 1893 there was a heavy fall all round, and the second half of that year marks the beginning of a new industrial period under vastly changed conditions. It is idle to speculate as to what would have been the course of industrial history had the banking crisis of 1893 not occurred. It may, however, be mentioned that wages had shown signs of falling before the suspensions took place. After the first shock of the crisis of 1893 there was a fall of about 10 per cent. in the wages of mechanics, and a somewhat greater fall in the wages of unskilled labourers. In 1894 there was no further fall, but employment became more restricted. In 1895, however, there was a still further decline, the wages of the year for skilled workmen being 22 per cent. below the rates of 1892, and for unskilled labourers about 17½ per cent. During 1896 wages in several trades rose, and since then there have been some further advances, and generally more regular employment than at any time since the bank crisis. In 1898, 1899 and 1900, employment in the building trades was plentiful, and the wages of masons, bricklayers, and allied trades rose to a point which they had not reached since 1889.

During the period under review there was a stoppage of nearly all forms of speculative activity; on the other hand, there was a marked extension of agriculture and important mining developments. The following were the average wages for the more important trades:—

Trade or Calling.	1893 (second half) and 1894	1895	1896	1897	1898	1899	1900
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*Males, per day, without board and lodging.*

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Carpenters ... ..	9 6	8 0	8 0	8 6	9 0	9 0	9 6
Blacksmiths ... ..	8 0	6 8	8 6	9 0	9 0	8 6	9 0
Bricklayers ... ..	9 6	8 6	9 0	9 0	9 0	9 8	11 0
Masons ... ..	8 6	7 8	9 0	9 0	9 0	10 3	11 0
Plasterers ... ..	8 6	7 0	7 0	8 0	8 0	8 6	9 6
Painters ... ..	8 0	7 0	7 0	8 0	8 0	7 0	9 0
Boilermakers ... ..	9 0	8 0	8 6	10 0	10 0	10 1	10 3
Labourers and navvies ...	6 0	6 0	6 0	6 0	6 6	6 9	6 10

*Males, per week, with board and lodging.*

Farm labourers ... ..	12 6	12 6	12 6	13 6	14 0	13 6	16 3
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*Females, per week, with board and lodging.*

Housemaids ... ..	10 0	10 0	10 0	11 0	11 0	11 6	11 3
Laundresses ... ..	14 0	14 0	14 0	15 0	15 0	18 6	18 9
Nursemaids ... ..	7 6	7 6	7 6	7 6	7 6	7 0	7 0
General servants ... ..	11 6	11 6	11 6	11 6	11 6	11 0	11 0
Cooks ... ..	14 0	14 0	14 0	14 0	15 0	20 0	20 0

The beginning of the new century saw the birth of the Australian Commonwealth, and there is no doubt that the federation of the States gave greater opportunities both to capital and labour, and thus led to increased production. At the close of the year 1901 also, the Industrial Arbitration Act was passed, and under the awards of the Court many industrial workers now enjoy a fixed hourly or daily wage. With these advantages, and the beneficial influence exerted by good seasons, it is not surprising to find that wages have been well maintained; the rate for unskilled labour having risen to 7s. per day, as shown in the following table:—

Trade or Calling	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
<i>Males, per day, without board and lodging.</i>								
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Carpenters ... ..	10 0	9 6	9 6	9 0	9 4	10 0	10 0	10 0
Blacksmiths ... ..	9 0	9 0	9 0	9 0	10 0	10 0	10 0	10 0
Bricklayers ... ..	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0
Masons ... ..	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0
Plasterers ... ..	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0
Painters ... ..	9 0	9 0	9 4	9 4	9 4	9 4	10 0	10 0
Boilermakers ... ..	10 4	10 3	10 3	10 3	10 3	10 3	10 3	10 3
Labourers and navvies	6 10	7 0	7 1	7 1	7 0	7 0	7 0	7 0
<i>Males, per week, with board and lodging.</i>								
	s. s.	s. s.	s. s.	s. s.	s. s.	s. s.	s. s.	s. s.
Farm labourers ... ..	17 6	16 0	16 0	16 0	16 0	15 0	15 to 20	20 0
<i>Females, per week, with board and lodging.</i>								
	s. s.	s. s.	s. s.	s. s.	s. s.	s. s.	s. s.	s. s.
Housemaids ... ..	12 6	12 6	12 0	12 0	12 0	12 0	12 to 15	13 to 15
Laundresses ... ..	17 6	17 6	17 6	15 0	18 0	20 0	15 ,, 20	17 ,, 20
Nursemaids ... ..	7 0	11 0	11 0	10 0	10 0	10 0	6 ,, 12	6 ,, 12
General servants ... ..	14 0	14 0	13 0	10 0	15 0	15 0	10 ,, 20	10 ,, 20
Cooks ... ..	22 6	22 6	19 0	17 0	17 0	17 0	15 ,, 20	15 ,, 20

#### IMPORTATION OF LABOUR.

State-assisted immigration was inaugurated in New South Wales in the year 1832, and continued until 1885. The policy was reinstituted in 1905, and the Government now holds out inducements to farmers, agricultural labourers, and domestic servants from Great Britain to emigrate to New South Wales. The selection of assisted immigrants is made mainly from the populations of England, Scotland, Ireland, and Wales; but a proportion may be drawn from Canada, South Africa, and other parts of the British Empire, also from the United States of America, and European countries other than the United Kingdom, provided they are eligible under the Regulations and the Commonwealth Immigration Restriction Acts. All assisted immigrants must be of sound mental and bodily health and of good moral character, must not exceed 50 years of age, and consist of *bonâ-fide* farmers, agricultural labourers, and domestic servants, and any others who can satisfy the Agent-General for New South Wales in London, or the Director of the Immigration and Tourist Bureau in Sydney that they will make suitable settlers. The wives and families of the same, if any, are assisted also.

Arrangements have been made with various steamship companies for reductions in the ordinary rates for second and third class passages from Great Britain and Germany, Belgium, Italy, and other European countries. Besides these reductions a Government contribution of £4 is made on each full fare and £2 on each half fare, which may be increased to £6 on each full

fare and £3 on each half fare in the cases of persons who settle on the soil, or engage in farm work or domestic service, immediately after arrival in New South Wales.

Persons nominated for assisted passages by friends or relatives in the State are granted a reduction of £4 on each full fare. Nominators are required to lodge the reduced steamer fare, with an undertaking that employment awaits the nominees or that adequate provision will be made for their maintenance. Any assisted immigrant who settles upon the land as owner, lessee, or labourer, within a reasonable time of his arrival, is entitled to a remission of one-half the railway fare for himself and family when travelling to the district in which he shall have settled, and also one-half of the railway freight charged on his household furniture, stock, and agricultural implements. This concession is granted also to nominated immigrants proceeding to the homes of their nominators, or travelling to take up farm work or domestic service.

Since the 1st January, 1906, the following assisted immigrants have arrived:—

Class of Immigrant.	From United Kingdom.	From South Africa.	From Canada.	From India.	From other Countries.	Total.
Farmers ... ..	67	16	1	8	1	93
Farm labourers ... ..	1,731	72	4	8	1	1,816
Miners, Ironworkers, &c. ... ..	264	46	.....	.....	.....	310
Domestic Servants ... ..	836	9	.....	.....	.....	845
Artisans and Mechanics... ..	171	164	.....	.....	.....	335
Labourers ... ..	165	23	.....	.....	.....	188
Others ... ..	31	12	.....	.....	.....	43
Families of above... ..	955	121	.....	2	7	1,085
Nominated Immigrants ... ..	1,551	81	5	1	14	1,652
Total ... ..	5,771	544	10	19	23	6,367

Of the unassisted immigrants, 1,915 were placed in employment through the agency of the Immigration and Tourist Bureau.

Under the Commonwealth Contract Immigrants Act of 1905, any contract immigrant may land in Australia if the terms of the contract are in writing and have been previously approved by the Minister for External Affairs. Contract immigrants are prohibited only, when, in the opinion of the Minister, the remuneration and other conditions of employment in the contract are not as advantageous to the immigrant as those current for workers of the same class at the place where the work is to be performed, or if the contract is made in contemplation of or with the view of affecting an industrial dispute.

#### TRADE UNIONS.

Under the Trade Union Act of 1881 the term "Trade Union" is defined to mean "any combination, whether temporary or permanent, for regulating the relations between workmen and employers, or between workmen and workmen, or between employer and employers, for imposing restrictive conditions on the conduct of any trade or business, whether such combination would or would not, if this Act had not been passed, have been deemed to have been an unlawful combination by reason of some one or more of its purposes being in restraint of trade."

After the passing of the Act of 1881, the advantages of registration were seen by the existent unions, and on an average about ten unions per annum applied for enrolment during the first eight years. In 1890 the State experienced great industrial disturbances, and the trades were roused to activity, so that during the next two years 59 unions came into existence, 38 in 1890, and 21 in 1891. The force of the movement had, then, however, spent itself, and during the nine years ended 1900, only 30 new bodies sought registration. In 1901 the Industrial Arbitration Act was passed, with the consequence that the unions once more became active, and during the years 1901 to 1907, no less than 144 new unions were formed. The total number of unions formed up to the end of 1907 was 316. Of these there were on that date 138, or 44 per cent., in existence, and 178, or 56 per cent., had disappeared by amalgamation, cancellation, or dissolution. It may be mentioned that out of 144 unions formed during the last seven years, 56, or 39 per cent., have already disappeared. The average duration of extinct unions has been about eight years.

The unions in existence at the end of 1907 are classified as follows, according to the industries or callings to which they are related:—

Calling.	No. of Unions.	Members.	Calling.	No. of Unions.	Members.
Mining ... ..	17	19,197	Building trades ... ..	16	4,734
Pastoral ... ..	2	25,675	Engineering and iron trades	12	5,246
Shipping and sea transport..	12	9,692	Other manufacturing ...	22	3,150
Railways ... ..	5	9,019	Others ... ..	18	4,831
Other land transport ...	5	2,227			
Food and drink ... ..	18	6,665	Total ... ..	138	95,701
Clothing ... ..	11	5,265			

The largest unions were the Australian Workers' Union (Pastoral), with 20,095 members; the Colliery Employees' Federation, with 8,934; the Machine Shearers' Union, 5,580; and the Railway and Tramway, with 4,653.

The following statement shows the position of the unions at the end of the last three years, as regards finances and membership:—

	1905.	1906.	1907.
Number of Unions existent, end of year...	137	136	138
Total income ... ..	£72,576	£72,502	£98,508
Total expenditure ... ..	£67,611	£65,209	£93,024
Total funds ... ..	£73,324	£82,053	£91,701
Membership ... ..	84,893	88,478	95,701
Income per member ... ..	17s. 8d.	16s. 9d.	£1 1s. 5d.
Expenditure per member ... ..	16s. 5d.	15s. 0d.	£1 0s. 2d.
Amassed funds per member ... ..	17s. 10d.	18s. 7d.	19s. 2d.

#### INDUSTRIAL UNIONS.

For the purposes of the Industrial Arbitration Act, passed on the 10th December, 1901, industrial unions of either employers or employees could be formed. The employment of not less than fifty persons entitled an employer or group of employers to registration, and a trade union or association of trade unions was entitled to registration as an industrial union of employees. The Industrial and Arbitration Act remained in force until the 1st July, 1908, when the Industrial Disputes Act, 1908, commenced; but the expiration of the first-mentioned Act did not affect the incorporation

of industrial unions which had been registered under that Act. The following statement shows, until the year 1907, the membership of the registered unions, both employers and employees:—

Year.	Employers' Unions.	Employees' Unions.
	Membership.	Membership.
1902	2,302	53,203
1903	2,916	63,510
1904	3,204	71,031
1905	3,343	78,665
1906	3,172	85,193
1907	3,229	96,581

#### INDUSTRIAL ARBITRATION.

The Parliament of New South Wales has given much attention to legislation having for its object the bettering of the industrial conditions of the people, settling trade disputes, and regulating the hours of employment, rates of wages, &c.

In the year 1892 the Trades Disputes Conciliation and Arbitration Act became law, and, as the preamble of the Act sets forth, it was believed the establishment of Councils of Conciliation and of Arbitration for the settlement of disputes between employers and employees would conduce to the cultivation and maintenance of better relations and more active sympathies between employers and their employees, and be of great benefit in the public interest by providing simple methods for the prevention of strikes and other disputes, from the effects of which industrial operations may suffer serious and lasting injury and the welfare and peaceful government of the country be imperilled.

As this Act did not compel either party to a dispute to submit its case to the Council of Arbitration and Conciliation, nor even to abide by the award if a case had been submitted, the statute did not prove successful in attaining the objects desired, and although it remained in force four years, only a few cases were decided under its provisions.

The Conciliation and Arbitration Act of 1899 provided for the prevention and settlement of trade disputes. It authorised the Minister, in cases where a difference existed or was apprehended between an employer and employees, to direct inquiry into the causes and circumstances of the difference, and to take steps to enable the parties to meet together under the presidency of a chairman mutually selected, with a view to amicable settlement of the difference. Failing such settlement the Minister could direct a public inquiry into the causes of the difference, and on the application of either employers or employees, or both, appoint a person or persons to act as conciliator or as a board of conciliation. On the application of both parties an arbitrator could be appointed.

Parties to a dispute could not be compelled to submit their cases, and very few instances are recorded in which this Act was used.

The Industrial Arbitration Act, 1901, provided for the registration and incorporation of industrial unions and the making and enforcing of industrial agreements; constituted a court of arbitration for the hearing and determination of industrial disputes and matters referred to it; defined the jurisdiction, powers, and procedure of such court, and provided for the enforcement of its awards and orders.

This Act remained in force until the 30th June, 1908.

In the year 1905 the Industrial Arbitration (Temporary Court) Act was passed and must be construed with the Industrial Arbitration Act of 1901.

Under the provisions of the last-mentioned Act, if the Registrar, or in cases of appeal the Court, was satisfied that compliance had been made with the Act there could be registered as an industrial union any person or association of persons, or any incorporated company or any association of incorporated companies, who, or which had employed on an average taken per month not less than fifty employees; and any trade union or association of trade unions.

The industrial union could make an agreement in writing relating to any industrial matter with another industrial union or with an employer.

The Court had jurisdiction to hear and determine, according to equity and good conscience, industrial disputes and industrial matters, and to make orders or awards in pursuance of such hearing and determination. An industrial dispute was defined to be a dispute in relation to industrial matters arising between an employer or industrial union of employers and an industrial union of employees or trade union, including a dispute arising out of an industrial agreement.

The Act, in providing for the prevention of strikes and lock-outs, made it a misdemeanour for any person who, before a reasonable time had elapsed for a reference to the Court of the matter in dispute, or during the pendency of any proceedings in the Court in relation to an industrial dispute, did any act or thing in the nature of a lock-out or strike; or suspended or discontinued employment or work in any industry; or instigated to or aided in any of the above-mentioned acts.

With regard to industrial agreements a large number of employers and employees' unions entered into agreements under the provisions of this Act, and in some cases where disputes were not filed the Court made the agreements common rules of the industries.

Tables are appended to this chapter showing the principal cases tried by the Industrial Court during the seven years of its existence, and the awards in respect to wages, &c.

It may be stated that the common rule was made to apply to persons other than the parties after notice to all known employers engaged in the industry. The object of the common rule is to place all employers on a similar footing, thus equalising conditions of employment and preventing unfair competition.

The Industrial Arbitration Act, 1901, was a tentative measure which was to remain in operation for seven years. Principally on account of the slowness of the Court in dealing with disputes, and the consequent congestion of cases, it was superseded by the Industrial Disputes Act, 1908.

## INDUSTRIAL DISPUTES ACT, 1908.

The Industrial Disputes Act, 1908, as amended by the Industrial Disputes Amendment Act, 1908, provides that all awards, orders, and directions of the Court of Arbitration, and all industrial agreements current and in force at the commencement of the Act are binding on the parties, and on the employers and employees concerned for the period fixed by the Court, or by the award, order, or agreement, and where no period is fixed, for one year from the 1st July, 1908. Any industrial agreement may be rescinded or varied in writing by the parties, and if filed with the Registrar is binding as part of the agreement.

Provision is made under this Act for the registration of trade unions, and the expiration of the Industrial Arbitration Act, 1901, does not affect the incorporation of industrial unions registered under that Act.

With regard to industrial agreements, any trade union registered under this Act may make an agreement with an employer in writing relating to any industrial matter.

The Industrial Court consists of a judge sitting with or without assessors.

*Constitution and powers of Boards.*

On application to the Industrial Court by—

- (a) an employer or employers of not less than twenty employees in the same industry; or
- (b) a trade union registered under the Act having a membership of not less than twenty employees in the same industry; or
- (c) an industrial union whose members are such employers or employees; or
- (d) where there is no trade or industrial union of employees in an industry having membership and registered as aforesaid, or where such union fails to make application, then not less than twenty employees in such industry;

the Court may recommend the Minister that a board be constituted for such industry, and the Minister may direct a board to be constituted accordingly.

The Minister may also, on the recommendation of the Industrial Court, but without any application, direct a board to be constituted.

Each board consists of a chairman and not less than two nor more than four other members as determined by the Industrial Court, one half of whom shall be employers and the other half employees who have been or are actually engaged in any industry or group of industries for which the board has been constituted. Where the employers or employees consist largely of females, the Court may order that all or any specified number of the members of a board need not have the qualifications.

Wherever it appears necessary, the chairman of a board may appoint two or more assessors representing employers and employees respectively, to advise the board on technical matters, but such assessors may not take part in the deliberations of the board.

Each member of a board and each assessor, upon appointment, must take an oath not to disclose any matter or evidence relating to trade secrets; to the profits or losses or the receipts and outgoings of any employer; the books of an employer or witness produced before the board; and to the financial position of any employer or of any witness.

*Jurisdiction of Boards.*

Proceedings before a board are commenced by—

- (a) reference to the board by the Industrial Court of any dispute; or
- (b) application to the board by employers or employees in the industry or group of industries for which the board has been constituted.

Such applications must contain the particulars prescribed and be signed by—

- (a) an employer or employers of not less than twenty employees in the same industry; or
- (b) not less than twenty employees in the same industry; or
- (c) the secretary of a trade union registered under this Act, having a membership of not less than twenty employees in the same industry; or
- (d) an industrial union whose members are such employers or employees.

A board with respect to the industry or group of industries for which it has been constituted may—

- (a) decide all disputes;
- (b) fix the lowest prices for piece-work, and the lowest rates of wages payable to employees;
- (c) fix the number of hours and the times to be worked in order to entitle employees to the wages so fixed;
- (d) fix the lowest rates for overtime and holidays and other special work, including allowances as compensation for overtime, holidays, or other special work;
- (e) fix the number or proportionate number of apprentices and improvers, and the lowest prices and rates payable to them. Such prices and rates may be according to age and experience;
- (f) appoint a tribunal, other than the board itself, for the granting of permits allowing aged, infirm, or slow workers, who are unable to earn the lowest rates of wages fixed for other employees, to work at the lowest rates fixed for aged, infirm, or slow workers. If no such tribunal is provided by the board, the registrar has jurisdiction to grant such permits;
- (g) determine any industrial matter;
- (h) rescind or vary any of its awards;

subject to the right of appeal under this Act, and to such conditions and exemptions as the board is authorised to determine. The award of a board is binding on all persons engaged in the industry or group of industries

within the locality specified for the period fixed—not less than one nor greater than three years. Every award of a board takes effect on its publication in the *Gazette*.

#### *Procedure of Boards.*

Where reference to a board is made it is the duty of the chairman to endeavour to bring about a settlement of the dispute, and to this end the board must expeditiously and carefully inquire into the dispute and all matters affecting it.

A board or any two or more members thereof may enter and inspect any premises used in any industry the subject of a reference or application to the board and any work being carried on there.

The board may admit and call for such evidence as in good conscience it thinks to be the best available, whether strictly legal evidence or not. The question as to the admissibility of evidence is decided by the chairman alone.

Unless by consent of the chairman, no person can appear as an advocate or agent who is not actually and *bonâ fide* engaged in the industry or one of the industries for which the board has been constituted.

#### *Appeal from Board.*

At any time within a month after publication of any award by a board, any trade or industrial union or any person bound by the award may apply to the Industrial Court for leave to appeal to such Court.

#### *Enforcement of Awards and Penalties.*

Where an employer employs any person to do any work for which the price or rate has been fixed by a board or by the Industrial Court, or for which the price or rate has been fixed by an award of the Court of Arbitration or by an industrial agreement, he is liable to pay in full to such person the price or rate so fixed.

If any person does any act or thing in the nature of a lock-out or strike, or takes part in such, or suspends or discontinues work in any industry, or instigates to or aids in any of the abovementioned acts, he is liable to a penalty not exceeding one thousand pounds or in default to imprisonment not exceeding two months.

If any person commits a breach of an award of a board, Court of Arbitration, or of the Industrial Court, or a breach of an industrial agreement, he is liable to a penalty not exceeding fifty pounds or in default imprisonment.

An employer is liable to a penalty should he dismiss an employee by reason merely of the fact that the employee is a member of a board or of a trade union or an industrial union, or has absented himself from work through being engaged in other duties as member of a board. When a member of a trade or industrial union is convicted of an offence against the Act, the Industrial Court may order the trustees of the trade union or of a branch thereof, or the industrial union, to pay out of the funds of the union or branch any amount not exceeding twenty pounds of the penalty imposed.

*General.*

Every employer in an industry in respect of which an award of a board or of the Court of Arbitration, or an industrial agreement is in force must keep time-sheets and pay-sheets of the employees in such industry, and such time-sheets, etc., may be examined by an inspector who reports to the registrar.

At the end of the year 1908, there were 79 boards constituted under the Act.

**MINIMUM WAGE ACT, 1908.**

This Act was passed towards the end of 1908, and provided that from the 1st January, 1909, any workman, that is any person employed in any factory under the "Factories and Shops Act," or in preparing or manufacturing any article for trade or sale, or any shop-assistant as defined by the Early Closing Act, must receive a wage of not less than 4s. per week.

Overtime for the workman is any time worked beyond forty-eight hours per week, or after 6 o'clock in the evening, and for a shop-assistant after half an hour after the closing time of the shop.

When any boy under 16 years of age or any female is employed overtime after 6 o'clock, a sum of not less than 6d. must be paid as tea money on the day such overtime is worked.

An amount of not less than 3d. per hour must be paid for overtime to any boy under 16 years of age or any female; the full rate of time and a half, however, is to be paid in cases where, under the Factories and Shops Act, the overtime pay would exceed 3d. per hour.

Every employer must keep a record of overtime worked by such of his workmen or shop-assistants as are males under 16 years of age or females, and must produce such record and furnish extracts therefrom to an inspector appointed under this Act.

No person may pay or give or receive any consideration, premium, or bonus for the employing by him of any female in the manufacture of any article of clothing or wearing apparel.

Contraventions or breaches of the Act, or of the regulations, are reported to the Minister by inspectors, and proceedings in respect thereof may not be instituted without the authority of the Minister.

Penalties may be recovered before a stipendiary or police magistrate, or before any two justices of the peace in petty sessions. Proceedings for recovery of any penalty must be commenced within three months after such contravention or breach.

The Act does not apply where all the persons employed as workmen and shop-assistants are members of the employer's family, related in the first or second degree by blood or first degree by marriage to the employer.

The statements appearing in the following pages show the principal cases heard by the Industrial Arbitration Court and the awards from 1901 to 30th June, 1908. The following are explanations of the terms used in the statements:—

*Claim.*—Claimant's claim in the industrial dispute.

*Answer.*—Respondent's answer in the industrial dispute.

*Award.*—Award of the Court of Arbitration in the dispute.

*Apprentices.*—Proportion of apprentices to journeymen.

*Preference.*—Preference of employment to members of the claimant union.

## A.—INDUSTRIES in which the Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Bread-carters ... ..	37/6	45/-	42/-	45/-	54 hours per week of 7 days, including Sunday, and 1 hour per day for meals.	Disputed.	48
Confectioners ... ..	50/-	55/-	50/-	50/-	48	48	48
Hotel, Club, Restaurant and Caterers' Employees— Cooks... ..	1st class, 30/- to 50/-; 2nd class, 30/- to 30/- and board.	30/- to 60/- and board.	20/- to 30/- and board.	25/- to 45/- (a)	60	71½	70
Pantrymen ... { Kitchen Hands ... {	12/- to 15/- and board.	2/-	12/- to 15/-	20/-	60	72	77
Pastrycooks— 1st hands ... .. 2nd „ ... .. 3rd „ ... ..	47/6 42/6 25/-	60/- 50/- 30/-	Admitted. „ „	60/- 50/- 30/-	48 (6 days of 8 hours).	48, and no limitation as to daily hours.	48, and no to exceed 10 hours daily.
Cutters and Trimmers— 1st Trimmer ... { 2nd „ ... {	50/- to 60/- {	60/- 40/-	50/- Disputed }	50/-	48	48	48
Tailors— Male Labour ... .. Female „ ... ..	50/- 32/-	55/- 40/-	Disputed .....	50/- 22/6 & 27/6	48 .....	Disputed .....	48 .....
Tailoresses— Tailoresses ... .. Coat Machinists ...	20/- 25/-	25/- 35/-	Disputed „	20/- 25/-	44 44	Disputed „	48 48
Furniture Makers— Mattress Makers } French-polishers } Cabinet-makers } Wood-turners & } Carvers, Chair & } Frame-makers, } Upholsterers } Carpet-layers } Carpet-cutters }	48/- { 52/- { 55/- {	52/- 54/- 60/- 60/- 80/-	50/- 48/- 52/- 52/- 64/-	48/- 50/- 60/-	48	48	48

were made Common Rules.

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
.....	.....	.....	1/- per hour after 60 hours have been worked.	Claimed; opposed; granted.	Hours, exclusive of stable work, &c., and not to exceed 60 hours weekly.	Bread-carters.
1 to 3 men, or fraction thereof.	.....	1 to 3 men, or fraction thereof.	.....	Claimed; granted.	.....	Confectioners.
.....	.....	.....	Chef, 1/- per hour; 2nd cook, 9d.; 3rd cook, kitchen hands, and pantry-men, 6d. per hour. Where weekly wage is more than £2 10s., overtime at time and a half.	Claimed; opposed; granted.	(a) Where business conducted on 6 days only, reduce hours by 5. Board 10/-, and lodging 5/- extra, if not provided by employer.	Hotel, Club, Restaurant and Caterers' Employees— Cooks.  Pantry-men. Kitchen Hands.
.....	.....	1 to 3 men or fraction thereof.	1st 3 hours over 48, ordinary rates; after 1st 3 hours, time and a half.	Claimed; admitted; granted.	.....	Pastrycooks— 1st hands. 2nd " 3rd "
1 to 3, or fraction thereof.	.....	1 to 3, or fraction thereof.	1st 2 hours, time and a quarter; thereafter, time and a half.	Claimed; admitted; granted.	.....	Cutters & Trimmers— 1st Trimmer. 2nd "
1 to 6, or fraction thereof.	Disputed	1 to 4, or fraction thereof. Female apprentices, 1 to every 3 journey-women, or fraction thereof.	1st 2 hours, time and a quarter; thereafter, time and a half; piece workers 3d. per hour extra for 1st 2 hours, 6d. per hour thereafter.	Claimed; opposed; granted.	.....	Tailors— Male Labour. Female "
1 to 4, or fraction thereof.	.....	1 to 2	Time and a half	Granted ...	Award by consent ...	Tailoresses— Tailoresses. Coat Machinists
1 to 4, or fraction thereof.	1 to 3, or fraction thereof.	1 to 3, or fraction thereof.	1st 3 hours, time and a half; after 3 hours, and Sundays and holidays, double time.	Claimed; opposed; granted.	.....	Furniture Makers— Mattress Makers. French Polishers. Cabinet-makers, Wood-turners and Carvers, Chair and Frame-makers, Upholsterers, Carpet-layers. Carpet-carters.

## A.—INDUSTRIES in which the Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
<b>Sawmill &amp; Timber Yard Employees—</b>							
Skilled Labour ...	48/-	From 48/- to 66/-	7/- to 8/- per day.	1 1/11 per hour.	48	48	48
Experienced Labour	42/-	50/- & 55/-	5/- per day	10 1/2d. per hour.			
Ordinary Labour (a)	36/-	45/-	5/6 and 6/- per day.	10d. per hour.			
" " (b)				9 1/2d. per hour.			
" " (c)				9d. per hour			
Casual " ...	.....	1/3 per hour	10d. per hour.	1/- per hour			
<b>Painters—</b>							
Competent Workmen or Specialists ...	51/4	1/3 per hour	1 1/11 per hour.	1/2 per hour	44	44	44
Under-rate men ...	.....	.....	10 1/2d. per hour.	10 1/2d. per hour.			
<b>Marble and Slate Workers—</b>							
Masons ...	54/-	10/- per day	9/- per day	1 1/11 per hour.	48	48	48
Polishers ...	42/-	8/- "	7/- "	10 1/2d. per hour.			
Machinists ...	45/-	9/- "	7/6 "	11 1/2d. per hour.			
<b>Broom Workers—</b>							
1st Sorters ...	36/-	{ 45/- 36/-	{ 42/- 30/-	{ 42/- and 45/- 35/-	48	48	48
2nd " ...							
Handle Painters ...	25/- to 40/-	45/-	25/- to 40/-	40/-			
<b>Bookbinders and Paper-rulers.</b>	52/-	60/- to 70/-	52/-	52 -	48	48	48

were made Common Rules--continued.

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
1 to 2	No restriction.	No restriction.	1st 2 hours, time and a quarter; thereafter until midnight, time and a half; after midnight and on holidays, double time.	Claimed; opposed; granted.	.....	Sawmill and Timber Yard Employees— Skilled Labour. Experienced Labour. Ordinary Labour (a) " " (b) Casual " (c)
1 to 4, or fraction thereof.	Admitted	1 to 4, or fraction thereof.	1st 2 hours, time and a quarter; next 4 hours, time and a half; midnight to 8 a.m., double time; Christmas Day, Good Friday, and Sundays, double time; other holidays, time and a half.	Claimed; admitted; granted.	.....	Painters— Competent Workmen or Specialists. Under-rate men.
1 to 4, or fraction thereof. 1 to 8, or fraction thereof. 1 to 1.	1 to 4, or fraction thereof.	1 to 4, or fraction thereof.	.....	Claimed; opposed; granted.	.....	Marble and Slate Workers— Masons. Polishers. Machinists.
.....	.....	...	Time and a half; piece-workers, 4d. per hour extra.	Claimed; opposed; granted.	... ..	Broom Workers— 1st Sorters. 2nd " " Hand Painters.
1 to first 4, 2 to 6; thereafter 1 to 3.	1 to 3	1 to 3, or fraction thereof.	1st 2 hours, time and a quarter; up to midnight, time and a half; thereafter double time. Sunday, Christmas Day, Good Friday, and 8 hours Day, double time; other holidays, time and a half.	Claimed; opposed; granted.	.....	Bookbinders and Paper-rulers.

## A.—INDUSTRIES in which the Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Journeymen Farriers— Floormen ... .. " (casual) ..... Firemen ... .. " (casual) .....	43/- ..... 60/- .....	50/- ..... 60/- .....	1/- per hour ..... 1/3 per hour .....	47/6 1/- per hour 57/6 1/24 per hour	48	48	48
Saddle and Harness Makers.	48/-	50/-	Object to minimum wage, except for old or incompetent men.	48/-	48	51	48
Brickmakers and Brickcarters— Burners ... .. Setters ... .. Drawers ... .. Machine-men ... .. Assistant Machine-men. Loftmen ... .. Panmen ... .. Men in charge of Winding Gear. Shooters ... .. Getters ... .. Fillers ... .. Yardmen ... .. Pressers ... .. Pressers' Assistants Man cutting off ... Feeders, Off-bearers, and Soakers.	48/- 48/- 48/- 48/- 38/- 42/- 44/- 42/- 48/- 48/- 48/- 36/- 48/- 40/- 40/- 42/-	10/- per day... 1/3 per hour 1/3 " " 1/- " " 10d. " " 1/- " " 1/1 " " 1/- " " 1/4 " " 1/4 " " 1/3 " " 1/- " " 1/6 " " 1/3 " " 1/- " " 1/1 " "	1/- per hour 1/- " " 1/- " " 10d. " " 9d. " " 10d. " " 11d. " " 11d. " " 1/1 " " 1/- " " 1/- " " 9d. " " 1/- " " 101. " " 10d. " " 10d. " "	8 hours per day	Disputed...	48 per week, except for Burners and Carters.	
Pottery and Terra Cotta Work— Pipe Machine Workers. Dressers, Trimmers, & Machine hands. Cutters and Floor-men. Drawers & Setters Pipe-carriers and Yardmen. Youths acting as Yardmen. Burners ... .. Assistant Burners Machine Feeders and Ring Oilers. Moulders and Pressers. Panmen and Clay-makers. Pitmen ... .. Carters ... ..	48/- 42/- 44/- 44/- 40/- 25/- 42/- ..... 40/- 48/- 48/- ..... .....	1/3 " " 1/1 1/2 " " 1/3 " " 1/- " " 10d. " " 1/1 1/2 " " 1/- " " 11d. " " 1/3 " " 1/3 " " 1/1 1/2 " " 8 1/4 to 12/- per day.	Disputed ..... ..... ..... ..... Disputed ..... ..... ..... ..... ..... Disputed				1/- " " 10d. " " 10d. " " 10d. " " 10d. " " 6 1/2 d. " " 10 1/2 d. " " 10 1/2 d. " " 10 1/2 d. " " 1/- " " 1/- " " ..... 1 horse, 40/- per week : 2 horses, 45/- : 2/6 each extra horse.
Tip-carters— Temporary work ... Permanent " .....	..... .....	12/- per day 11/- " "	11/-	11/-			.....

were made Common Rules—*continued.*

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
1 to 3	Disputed {	1 to 3, or fraction thereof.	.....	Claimed; opposed; granted.	.....	Journeymen Farriers— Floormen. (casual). Firemen. (casual).
1 to 3, or fraction thereof.	Object to Limitation.	1 to 3 in saddlery branch; 1 to 2 in other branches.	6 a.m. to 8 a.m., and 6 p.m. to 8 p.m., time and quarter; 8 p.m. to 6 a.m. time and a half; holidays and Sundays, double time; piece-workers, 3d. per hour extra.	Claimed; opposed; granted.	.....	Saddle and Harness Makers.
.....	.....	.....	1st 1½ hours, time and a quarter; thereafter, time and a half; Sunday, double time, except for Burners.	Claimed; admitted; granted.	.....	Brickmakers and Brick-carters— Burners. Setters. Drawers. Machine-men. Assistant Machine-men. Loftmen. Panmen. Men in charge of Winding Gear. Shooters. Getters. Fillers. Yardmen. Pressers. Pressers' Assistants. Man cutting off. Feeders, Off-bearers, and Soakers.  Pottery and Terra Cotta Work— Pipe Work— Workers. Dressers, Trimmers, and Machine hands. Cutters and Floor-men. Drawers and Setters. Pipe-carriers and Yardmen. Youths acting as Yardmen. Burners. Assistant Burners. Machine Feeders and Ring Oilers. Moulders and Pressers. Panmen and Clay-makers. Pitmen. Carters.
.....	.....	.....	.....	.....	.....	Tip-carters— Temporary work. Permanent „

## A.—INDUSTRIES in which the Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Trolley, Draymen, and Carters— Horse-driver— Heavy (1) .. " (2) .. Light ..	..... ..... ..... ..... .....	42/- 48/- .....	36/- 40/- .....	40 - 45/- 40/-	} 57	77	57 (d)
Undertakers' Em- ployees— Shopmen .. Yard and Coachmen	45/- 30/-	50/- 42/-	45/- 42/-	47/6 45/6			
Sydney Wharf Labourers (dispute with Sydney Stevedores' Wool Dumping and Lighterage Association).	1/- per hour	1/3 per hour	1 -	1/3	44	44	44
Broken Hill Miners— Shaftsmen .. Ordinary Miners .. Surface Employees over 16 years of age.	..... ..... ..... .....	12/- per day 10/- " 9/- "	That exist- ing wages be re- duced 10 %.	Existing wages.	46	Disputed	Existing hours to be con- tinued.
Plasterers ..	1/3 per hour	1/3 per hour; 1/4½ when engaged on sewer, tunnel, and shaft work; foremen, 1½d. an hour extra.	1/- per hour; sewer and tunnel work, 1/1; foremen's wages to be fixed by employer.	1/3 per hour; sewer, tunnel, and shaft work, 1/4½.	48	48	48
Tug Boat Employees v. Brown— Mates .. Firemen .. Cooks... Deck Hands ..	..... ..... ..... .....	£9 per month and found. £9 " £7 " £7 "	£8 and find them - selves. £9 and find them - selves. £5 and be found by crew. £6 and find them - selves.	£7/10/- and found. £8/10/- and found. £5/10/- and found. £6 and found.	} Firemen, 4 hrs. on and 8 off. All others, 60 hours per week.	As required by employer	.....
Carpenters and Joiners (work on shore).	54/-	1/4½ per hour	1/1½	1/3	44	48	48

were made Common Rules—continued.

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
.....	.....	.....	{ 1st 2 hours, time and a quarter; thereafter, time and a half.	Claimed; opposed; granted.	(d) Exclusive of meal hours and stable work; 2/6 per week for each extra horse above 2.	Trolley, Draymen, and Carters— Horse-driver— Heavy (1). Light. (2).
.....	.....	.....	{ 1/- per hour; Christmas Day and Good Friday, 2/- per hour.	Claimed; opposed; granted.	.....	Undertakers' Employees— Shopmen. Yard and Coachmen.
.....	.....	.....	Special overtime rates, 1/9 to 5/- per hour; loading frozen meat, 3/- per hour all through ordinary working hours.	Claimed; opposed; granted.	.....	Sydney Wharf Labourers (dispute with Sydney Stevedores' Wool Dumping and Lighterage Association).
.....	.....	.....	.....	Granted	.....	Broken Hill Miners— Shaftsmen. Ordinary Miners. Surface Employees over 16 years of age.
1 to every 3 journey-men.	Disputed	1 to every 3 journey-men or fraction thereof, but not more than 4 in all.	Time and a quarter for first two hours, time and a half thereafter.	Claimed; opposed; refused.	.....	Plasterers.
.....	.....	.....	* See Note.	Claimed; opposed; granted.	Note: Judgment—If men find themselves, £1/19/- a month extra to be paid,	Tug Boat Employees v. Brown— Mates.  Firemen.  Cooks.  Deck Hands.
* In each port one boat's crew may be kept back after 6 p.m. on each day to wait for orders. If any of the other crews are kept back to wait for orders after 6 p.m., or after the time that their boat returns, if it returns after 6 p.m., each member of the crew shall be paid not less than 1s. an hour overtime after 6 p.m., or after such return, when later than 6 p.m., as the case may be.						
.....	.....	.....	First 2 hours, time and a quarter; time and a half thereafter; holidays, double time.	Claimed; opposed; refused.	Special provision for under-rate men.	Carpenters and Joiners (work on shore).

## A.—INDUSTRIES in which the Award

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Milk and Ice Carters and Dairymen's Employees— Milk Carters .....	.....	45/- per week, unless delivering under 30 gallons per day, when wage shall be 40/-	45/- per week when delivering 45 gallons or more; under that 40/-	If delivering 40 gallons or more per day, 45/-; under 40 gallons, 40/-	60	Unlimited	60
Special Delivery Carters. ....	.....	30/-	Over 21 years of age, 30/-	Over 21 years of age, 30/-	56	56	56
Drivers of Double Teams. ....	.....	47/6	45/-	45/-	56	56	56
Milk Weighers— Leading Hands... ..	.....	45/-	} 40/- {	} 45/- 40/- {	} 48	56	50
Ordinary Hands... ..	.....	42/-					
Milk Receivers— Leading Hands... ..	.....	45/-	} 40/- {	} 45/- 40/- {	} 48	56	48
Ordinary Hands... ..	.....	42/-					
Grooms, Yardmen, &c. ....	.....	42/-	40/-	40/-	56	56	56
Ice Carters— Ordinary Hands... ..	.....	47/-	37/6	42/-	} 54 per week of 6 days.	60 per week of 7 days.	57 per week of 6 days
2-horse Drivers, delivering in bulk. ....	.....	45/-	40/-	45/-			
1-horse Drivers, delivering in bulk. ....	.....	42/-	37/6	40/-			
Casual Labour ... ..	.....	1/- per hour; 1/6 per hour on Sundays and statutory holidays.	Admitted	1/- per hour; 1/6 per hour on Sundays and statutory holidays.	.....	.....	.....
Wire Mattress Makers— Weavers ... ..	.....	48/-	} Disputed {	} 48/- 45/- {	48	Admitted.	48
Bench Hands, Tacker-on, Plyer-up, and Fitter. ....	.....	45/-					
Tug-boat Employees— Mates ... ..	.....	£7/10/- per month and found.	£8 and find themselves.	£7/10/- and found.	Firemen 4 hours on and 4 hours off, except where 3 men are employed, then the hours to be 4 on and 8 off. Deck hands, when at sea, 4 hours on and 4 off.	Firemen should work in accordance with existing conditions. Deck hands should work when required by the employer.	.....
Firemen ... ..	.....	£8/10/- per month and found.	£9 and find themselves.	£8/10/- and found.			
Cooks... ..	.....	£5/10/- per month and found.	£5/10/- and found by crew.	£5/10/- and found.			
Deck Hands ... ..	.....	£6 per month and found.	£7 and find themselves.	£6 and found.			
Carpenters and Joiners (employed in Ship-building). ....	1/3 per hour	1/4½ per hour	1/3	1/3; Leading hands, 1/- per day extra.	44	44	48

were made Common Rules—*continued.*

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
.....	.....	.....	.....	Claimed; admitted; granted.	Award made a Common Rule, subject to cer- tain conditions and exceptions.	Milk and Ice Carters and Dairymen's Em- ployees— Milk Carters:
.....	.....	.....	9d. per hour; Sundays and statutory holi- days, 1/.	.....	.....	Special Delivery Carters.
.....	.....	.....	1/- per hour; Sundays and statutory holi- days, 1/6.	.....	.....	Drivers of Double Teams.
.....	.....	.....	1/- per hour	.....	.....	{ Milk Weighers— Leading Hands. Ordinary Hands. Milk Receivers— Leading Hands. Ordinary Hands. Grooms, Yardmen, &c. Ice Carters— Ordinary Hands. 2-horse Drivers, delivering in bulk. 1-horse Drivers, delivering in bulk. Casual Labour.
.....	.....	.....	1/- per hour	.....	.....	
.....	.....	.....	1/- per hour	.....	.....	
.....	.....	.....	1/- per hour	.....	.....	
.....	.....	.....	.....	.....	.....	.....
1 to 3, or fraction thereof.	1 to 3, or fraction thereof.	1 to 3, or fraction thereof.	Time and a half after prescribed hours and for Sundays and holidays.	Claimed; opposed; granted.	Award by consent.	{ Wire Mattress Makers. Weavers. Bench Hands, Tacker-on, Plyer-up, and Fitter.
.....	.....	.....	.....	Claimed; opposed; granted.	NOTE: Judgment—If men find themselves, £1/19/- a month extra to be paid.	Tug boat Employees— Mates.  Firemen.  Cooks.  Deck Hands.
.....	.....	.....	Time and a half up to 10 p.m., then double.	Claimed; admitted; granted.	Mort's Dock and En- gineering Co., Ltd., excepted so far as re- lates to time of ceasing work by employees.	Carpenters and Joiners (employed in Ship- building).

## A.—INDUSTRIES in which the Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Sydney Coal-lumpers— Coal-lumpers (generally). Winchmen (special)	..... .....	1/9 per hour "	1/6 £10 a month	1/6 £10 a month & found.	7 a.m. to 6 p.m., Mondays to Fridays; 7 a.m. to 1 p.m., Saturdays.	6 a.m. Mondays to 6 p.m. Saturdays.	6 a.m. Mondays to 6 p.m. Saturdays.
Newcastle Wharf Labourers.	1/- per hour (day), 1/6 per hour (night).	1/- per hour.	48/- per week.	1/- per hour.	44	60	50
Tailoresses— Tailoresses .....	20/- 25/-	25/- 35/-	Disputed. .....	20/- 25/-	44 44	Disputed "	48 48
Coat Machinists ...	25/-	35/-	.....	25/-	44	"	48
Ironworkers' Assistants— Engineers, Moulders, Blacksmiths, Coppersmiths, and Sheet-iron Workers' Assistants; Boiler-makers' Assistants, Drillers, Dressers, and Furnacemen.	6/6 per day.	7/6 per day of 8 hours, or 11½d. per hour.	6/6 per day	7/- per day of 8 hours, or 10½d. per hour.	46	Disputed	48
Shore Drivers and Firemen— Firemen and Drivers	Engine-drivers, 45/-. Firemen, 40/-.	Drivers, 10/-. Firemen, 9/- per day.	..... .....	10/- per day 9/- per day	48 48	.....	48
Shop Assistants— Drapery, Clothing, Mercery, Tailoring, Hats, Boots, Millinery, Furniture, General Furnishing, Ironmongery, Crockery, Fancy Goods, Sporting Materials, Oils and Colours.	Adult males, 35/- per week. Adult women, 18/- per week.	See Note *	See Note †	See Note †	52	Disputed	53

\* Apprentices—Males, 1 to 4 years, 10/-, 15/-, 20/-, 30/-, respectively; Females, 1 to 4 years, 7/6, 12/6, 17/6, and 25/-, respectively; Juniors, males, first year, 40/-; second year, 50/- per week. Females, 32/6 and 40/-, as above. Senior male assistants, 60/- per week. Senior females, 45/- per week. Casuals, 25 per cent. increase on above rates.

† Apprentices—Males, 1 to 4 years, 5/-, 7/6, 10/-, and 15/-, respectively. Females, 1 to 4 years, 2/6, 5/-, 7/6, and 12/6, respectively. Junior males, first year, 20/-; second year, 22/6. Females, 15/- and 17/6 per week.

‡ According to age: 5/- to 27/6 for females; 5/- to 50/- for males. Office assistants, 14 years to 23 years: Males, 5/- to 42/-; females, 5/- to 25/-, according to age. Storemen and packers, not less than 23 years of age, 45/- per week. Boys and girls, not engaged in selling, not less than 5s. per week. Casual workers engaged for Saturday afternoons or evenings, 7/6; afternoon and evening, 10/-.

Trolley, Draymen, and Carters.	No information.	Light carriers' weekly hands, 1-horse driver, 42/6 per week; 2-horse, 47/6 per week; 3 or more, 50s. per week. Heavy carriers—1-horse, 42/- per week; 2-horse, 47/-; and 3-per man per week for each additional horse.	Admitted (in part). 1-horse driver, 42/6 per week. 2-horse drivers, 47/6 per week; 3 or more, 50/- per week. Heavy carriers: 1-horse, not less than 41/-; 2 horses, 46/6; and 3/- per man per week for each additional horse.	57	Disputed	60
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were made Common Rules—continued.

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
.....	.....	.....	Other rates, from 3/- to 5/- per hour.	Claimed, admitted, & granted upon application for Common Rule.	.....	Sydney Coal-lumpers—Coal-lumpers (generally). Winchmen (special).
.....	.....	.....	1/6 per hour, except after 4 p.m. Saturday and when ordered out at midnight on Sunday, then 2/- per hour.	Claimed; opposed; granted.	Made a Common Rule subject to certain conditions and exceptions as appear upon comparison of amended schedule with the award.	Newcastle Wharf Labourers.
1 to 4 or fraction,	.....	1 to 2	Time and a half	.....	Awards by consent	Tailoresses— Tailoresses. Coat Machinists.
No claim	.....	.....	Ordinary, time and a half; night shift, first eight hours, time and a quarter, then time and a half.	.....	.....	Ironworkers' Assistants— Engineers, Moulders; Blacksmiths, Copper-smiths, and Sheet-iron Workers' Assistants; Boiler-makers' Assistants, Drillers, Dressers, and Furnacemen.
No claim	.....	.....	First two hours, time and a half, double time thereafter. Holidays, time and a half.	.....	Award on failure to file answer.	Shore Drivers and Firemen— Firemen and Drivers.
Introduction of apprenticeship system abandoned.	.....	.....	Time and a half; double time for holidays.	.....	.....	Shop Assistants— Drapery, Clothing, Mercery, Tailoring, Hats, Boots, Millinery, Furniture, General Furnishing, Ironmongery, Crockery, Fancy Goods, Sporting Materials, Oils and Colours.
No claim.	.....	.....	Time and a half One-horse driver, 1s. per hour. Two-horse driven, 1s. per hour first two hours, and 1s. 3d. for each following hour. Two or more horses, 1s. 3d. first two hours, and 1s. 6d. each following hour.	.....	.....	Trolley, Draymen, and Carters.

## A.—Industries in which the Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Milk and Ice Carters, and Dairymen's Employees.	Carters, 1/6 to 20/- per week and board and lodging. Milkers, 15/- to 20/- with board and lodging.	Carters, if delivering under 40 gallons, 40/- per week; over 40 gallons, 45/- per week; milkers, 40/-; yardmen and stablemen, 36/-; boys accompanying milk carters, 10/- per week. Employers not to board and lodge employees.	Disputed.	Dairy employees doing milking or carting between 18 and 21 years of age, 22/6 per week and board and lodging. Employees not doing milking and carting, between 18 and 21 years, 15/- per week and board and lodging. Over 21 years, 20/- per week and board and lodging.	70	Disputed	70
Factory Employees ... (Employees in Laundries.)	Women in wash-house, 14/- per week; General adult hands, 2/6 per day. No other information.	See note below: (a)-(t).	.....	As claimed (except assistants in wash-houses), struck out.	48	.....	48

Wages to be weekly, daily, or at piece rates, by arrangement between employers and workers.

- (a) Folders, 7/- per week for the first three months, 8/- per week for the next three months, and afterwards 10/- per week minimum. Folders are to be employed in all the different processes of folding, shaking-out, attending to mangles of all descriptions.
- (b) Shirt and Collar Machinists, 8/- per week for the first three months, 10/- per week for the next three months, and afterwards 15/- per week minimum.
- (c) Body and Sleeve Ironers, 10/- per week for the first three months, and afterwards 12s. per week minimum.
- (d) General adult hands, Hangers-out, &c., 4s. per day or 15/- per week. General adult hands are to be employed as Hangers-out and make themselves generally useful.
- (e) Women working in wash-house, 20/- per week minimum. Casual hands, 4s. per day.
- (f) Starch Ironers are to be engaged in the ironing of dresses, blouses, dress bodices, petticoats, wrappers, white coats, vests, and pants, and all other starched garments. Starch Ironers to receive one-third of the price charged to customers.
- (g) Shirts ironed by hand, 1/9 per dozen.
- (h) Backing-up machine-ironed shirts, -/9 per dozen.
- (i) Shirts ironed by Machine and Body Ironers, -/6 per dozen.
- (j) Shirts ironed by hand and polished by machine, 1/3 per dozen.
- (k) Sorters—Beginners, 10/- per week for the first three months, 15/- per week for the next three months, and afterwards 20/- per week minimum.
- (l) Plain Ironers, -/6 per dozen and 3/- per day, at option of employer, such option to be exercised at the commencement of the employment. Plain Ironers are to be engaged ironing all the different kinds of gentlemen's, ladies', and children's body linen, and all the different smaller articles to be done up in the laundry which are not starched.
- (m) Hand Collar and Cuff Ironers—Collars, single, -/4½ per dozen, double, -/6 per dozen; cuffs, 1/- per dozen pairs.
- (n) Book-keepers, 10/- per week for the first six months, 15/- for the second six months; minimum, £1 per week thereafter.
- (o) Starchers, 18/- per week minimum. Starchers to prepare their starch.
- (p) Starch Machinists, 10/- per week minimum. Starch Machinists are to be in attendance upon the different kinds of starching machines.
- (q) Male hands working machinery in wash-house, £2 per week minimum. Male workers in a wash-house are to be in attendance upon all the different kinds of machines in the wash-house and to keep the same clean. Assistants in the wash-house, 50/- per week minimum. Assistant youths in the wash-house to be in attendance in the wash-house.
- (r) Carters to receive £2 per week.
- (s) Carters collecting and delivering less than £20 of work a week to receive £11/10/- per week.
- (t) Boys sitting in cart in charge of same while carter is away, 7/6 per week minimum.

Typographical ...	No information.	Piecework log. Apprentices— 7/3 1st year 10/- 2nd „ 12/6 3rd „ 15/- 4th „ 20/- 5th „ 25/- 6th „ 30/- 7th „ Journeyman on day wages, 60/- per week.	Disputed...	Journey-men on day wage, 56/- per week; apprentices as claimed; piecework log.	48	48	48
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were made Common Rules—*continued.*

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
No claim.	.....	.....	Time and a half	.....	.....	Milk and Ice Carters, and Dairymen's Employees.
No claim.....	.....	.....	Time and a half..	.....	<p>Award on failure to file answer.</p> <p>One week's notice is to be given on either side to determine employment.</p> <p>Employees may be shifted for the time being from one department to another, provided the wages paid in the department to which any employee may be shifted are not on a higher scale than the wages paid in such employee's permanent or regular department. In the event of any employee being shifted into a department where a higher scale of wages is paid, the higher rate shall be paid to such employee.</p> <p>All labour not employed by the week is to be classed as casual labour, and to be paid at double rates.</p>	Factory Employees (Employees in Laundries.)
1 to each jobbing, and 1 to 3 men permanently employed.	As claimed	As claimed	Time and one-third till 12 p.m.; double time thereafter.	Granted ...	Award by consent ...	Typographical.

## A.—INDUSTRIES in which the Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Firemen & Deckhands	Firemen, 35/- to 42/-; deck hands, 15/- to 25/-.	Firemen greasing and firing, 50/- per week; firemen firing only, 40/- per week; firemen doing firing and deckhands' work, 45/- per week; deckhands on Parramatta River, 36/- per week; on Sydney Ferries, 30/- per week.	Disputed...	Firemen on all boats authorised to carry more than 800 passengers, 50/- per week; on all other boats, 45/- per week. Deckhands on all boats except those plying to Parramatta River: Boys under 17 years of age, 15/- per week; between 17 and 18, 17/6; between 18 and 20, 20/-; between 20 and 21, 25/-; adults, 30/-; on Parramatta Ferries, 36/- per week.	48	Disputed...	120 per fortnight.
Boot, Shoe, and Slipper Factories ...	No information.	1/3 per hour for 44 hours.	See note *	See note †	44	Disputed...	48
<p>* For makers, finishers, clickers, cutting or skiving outsides, principal rough stuff cutters, cutting out soles, machine operators and hand closers, 7/6 per day of 8 hours; assistant rough stuff cutters, men cutting linings exclusively, and all others, 6/8 per day of 8 hours.</p> <p>† Makers, finishers, clickers, cutting or skiving outsides, stuff cutters, machine operators and hand closers, 48/-; assistant stuff cutters, 45/- per week; men cutting linings exclusively, 42/- per week, and then dependent on Victorian Wage Board conditions.</p> <p>‡ 1 to 3 journeymen, clickers, operators, finishers, and rough stuff cutters, 2 to 2 journeymen; 3 to 4 journeymen; 4 to 6 journeymen; 5 to 8 journeymen; 6 to 10 journeymen; 7 to 12 journeymen; and thereafter in the same proportion.</p>							
Bakers— Persons employed in making and baking bread either by machinery or by hand, divided into the following classes, viz., skilled operators, apprentices, and machine hands.	No information.	52/6	Admitted..	Skilled operatives, 52/6 per week; machine hands according to age; less than 16½ years to 21 years and upwards, 15/- to 42/- per week.	9 hours a day or night, out of which 1 hour for meals and dressing.	Admitted..	As claimed
Stove and Piano— Frame Moulders, Furnacemen, Labourers, Filers, Moulders, Dressers, Grinders, Polishers, Stove Fitters, and Sheet-iron Workers.	No information.	Journeymen, fitters, and sheet-iron workers, 50/- per week; furnacemen 60/- per week; assistants, 48/- per week; pattern filers, 54/-; polishers, 50/-; grinders, 45/-; labourers, 42/-; iron-moulders, 60/- per week.	Disputed	Furnacemen, 54/-; assistants, 42/-; labourers, 42/-; pattern filers, 50/-; polishers, 48/-; dressers, 42/-; stove makers and sheet iron workers, 48/-; moulders, 50/-; grinders, 42/-.	48	Agreed to	48
Cold Storage Employees— (1) Receiving, storing, and handling any produce or ice either for local consumption or for export, in the freezing chambers of freezing works. (2) Cleaning and chipping snow from the pipes in such chambers.	No information.	1/6 per hour	10½d. per hour.	If by week, 48/-; if by hour, 1/8 per hour.	Week's work to consist of 5 days and till noon on Saturday.	Disputed	48/-

were made Common Rules—continued.

Apprentices			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
No claim	.....	.....	Time and a quarter 1st 2 hours, time and a half thereafter; work on "off Sunday," time and a half.	.....	.....	Firemen and Deckhands.
1 to 4 or fraction.	1 to 1	See note 1.	Time and a quarter for 1st 2 hours, and time and a half after.	Granted	.....	Boat, Shoe, and Slipper Factories.
2 to 4, or 3 to 8.	Disputed.	Each shop allowed 1 or 2 to 4 constant skilled operators, and 3 for 8, but no shop to have more than 3.	None until 48 hours per week have been worked; on one night shift not more than 3 hours to be worked to make up any deficit of 48 hours; then 1/8 per hour, or 1/6 for every 20 minutes or fraction.	Conditional	.....	Bakers— Persons employed in making and baking bread either by machinery or by hand, divided into the following classes viz., skilled operators, apprentices, and machine hands.
1 to 6	No limitation.	.....	1st 2 hours, time and a quarter; thereafter till midnight, time and a half; double time on Sundays and holidays, and after midnight.	.....	.....	Stone and Piano— Frame Moulders, Furnacemen, Labourers, Filers, Moulders, Dressers, Grinders, Polishers, Stone Fitters, and Sheet-iron Workers.
No claim	.....	.....	1/6 per hour, conditional.	Conditional	.....	Cold Storage Employees— (1) Receiving, storing, and handling any produce or ice either for local consumption or for export, in the freezing chambers of freezing works. (2) Cleaning and chipping snow from the pipes in such chambers.

## A.—INDUSTRIES in which the Awards.

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Sawmill and Timber Yard Employees'— Class of labour. See minimum wage column.	No information.	See note *	Disputed	See note †	48	Admitted	48

\* Labourers, 42/- per week; ordermen and tallymen, 47/6; circular sawyer, cutting 8 in. or over, 60/-; cutting 6 in. and under 8 in., 54/-; cutting under 6 in., 45/-; cross-cut sawyer, 45/-; breaking down frame sawyer, 48/-; boarding frame sawyer, 45/-; saw sharpeners, 60/-; saw doctors, 70/-; log band doctors, 70/-; setters to log band saw, 48/-; edging sawyers, 48/-; puller-out from log band saw, 45/-; re-cutting band sawyers, wheel 4 ft. and over, 60/-; same with wheel under 4 ft., 50/-; wood-turners, 63/-; wood-turners' apprentices to 5 years, 7/6 to 35/-; machinists, 60/-; machinists apprentices, 1 to 5 years, 7/6 to 35/-; puller-out cutting, 8 inches and over, 48/-; puller-out, 6 inches and under 8, 45/-; puller-out cutting, 6 inches, 42/-; spoke and knave turners, 66/-; boys over 16, hourly rate, equal to 15/- per week; 17 years, hourly rate, equal to 17/6 per week; 18 years, hourly rate, equal to 20/- per week; 19 years, hourly rate, equal to 25/- per week; 20 years, hourly rate, equal to 30/- per week; box and case makers, 54/-; box or case nailing machine, 54/-; box or case printing machine, 45/-; apprentices to same, 16-17, 17/6; 17-18, 22/6; 18-19, 27/6; 19-20, 35/-; 20-21, 42/-.

† Saw doctors, 1/3 per hour; log band sawyers, 1/3; wood-turners and 1st class machinists, 1/3; saw sharpeners, 1/2d; tool grinders exclusively, 1/1d; 1st class sawyers, 1/1d; 2nd class, 1/0d; re-cutting band sawyers, 4 ft. wheel, 1/-; ordermen, 1/-; box-makers, 1/-; engine-drivers, 1/-; crane-drivers, 1/-; recutting band sawyers, wheel under 4 feet diameter, 11d.; 3rd class sawyers, 11d.; breaking down frame sawyers, 11d.; boarding frame sawyers, 11d.; setters to log band saw, 11d.; cross-cut saw and building lathe cutters, 11d.; edging sawyers, 11d.; tallymen, 11d.; measurers, 11d.; firemen, 11d.; 2nd class machinists, 11d.; pullers-out, 10d.; nailing machine operators, 10d.; printing machine operators, 10d.; men who have had in any timber yard, whether as men or boys, more than six months experience, at the rate of 10d. per hour; men who have not had such experience, at the rate of 10d. per hour; casual labour, 1/1d per hour; casual labour, carrying out timber, 1/6 per hour.

Brickmakers and Brick Carters.	No information.	See note †	Disputed ...	See note §	8 per day	Disputed	8½ per day
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† Coal carting and yard work, 12/- per day of 8 hours; 1/- per 1,000 for all bricks packed in straw 1/6 per 1,000 packed in bagging; 1/6 per hour to be paid for unloading for all time exceeding ¼ hour; 1/- per 1,000 for delivery on wharves; night work half rates extra; carts kept waiting 1/6 per hour for time wasted, and as set out in schedule to claim.

§ Burners, 1/- per hour; setters, 1/1d drawers, 1/1d; loaders out, 1/-; machineman, 1/0d; machineman's assistant, 10d., over 21 years, same, under 21 years, 8d.; loftman, 10d.; loftman, youth under 21 years, 8d.; panman, 1/1; panman, no gear, 1/-; panman, youths under 21 years, 8d.; wheelers and yardmen, 1/-; shooters, 1/2; fillers and getters, 1/1; pressers, 1/3; pressers' assistants, 1/-; cutters off, 1/-; feeders, 1/1; off-bearers, 1/-; soakers, 1/-; pit foreman, 1/3; pipe machine workers, 1/1; pipe dressers' trimmers, 1/-; cutters and floormen, 1/-; pipe carriers and yardmen, 1/-; burners, 1/1; burners working under instructions, 1/-; setters, 1/1; machine feeders, 1/-; pitmen, 1/-; moulders and pressers, 1/1; panmen and clay-makers, 1/1; panmen's assistants, 11d.; ring oilers, pipe over 9 in., 1/-; ring oilers, youths, 6d. Carters' wages: drivers of 1 horse, 40/- per week; 2 horses, 45/- per week, and 2/6 per week extra for each additional horse; boy labour, when union agrees, 32/- per week; learners, 25/- per week; 1/- per 1,000 for bricks packed in straw; 1/3 per 1,000 packed in bagging; 1 horse to draw 334 bricks to job; if loads divided, to be paid extra; carrying bricks across foot path more than 12 ft. wide, extra pay; extra payment for bricks on scaffolding; 1/- p. 1,000 extra for bricks delivered on wharves.

Letterpress Printers and Machinists ...	No information.	D. demy machines, 60/- per week; machines up to and including royal, 52/- per week.	Disputed	Demy cylinder machines 56/- per week; cylinders up to and including double crowns, 50/- per week.	48	Admitted	48
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were made Common Rules—continued.

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
Machinists, 3 to 1. Wood-turners, 1 to 4. Box and case-makers, 1 to 5.	Disputed	Wood-turners, 1 to 3, or fraction of 3.	Time and a quarter 1st two hours and time and a half till mid-night; double time thereafter.	Conditional	.....	Sawmill and Timber Yard Employees—Class of labour. See minimum wage column.
No claim	.....	.....	Except carters, first hour and a half, time and a quarter, then time and a half; carters; first two hours, time and a quarter, and then time and a half. Holidays—Time and a half, except to burners, who shall be paid ordinary rates.	.....	Night work additional half rates.	Brickmakers and Brick Carters.
1 to each office and 1 to 3 journeymen	Disputed	1 to each office and 1 to 3 journeymen permanently employed.	One and one third the hourly rate of wage; 12 to 8 a.m. double time rates.	Conditional	.....	Letterpress Printers and Machinists.

## A.—INDUSTRIES in which the Award

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Trolley, Draymen, and Carters	No information.	Weekly hands, 1 horse 42/- per week, 2 horses 47/- per week, and 3/- per week per man for each additional horse. Drivers put off during week, i.e., casual hands, 1 horse 8/- per day, 2 horses 9/- per day, 3 or more horses 10/- per day; 52/6 weekly, or 1/3 per hour.	Admitted	As claimed	54	57	57
Brushmakers	No information.	52/6 weekly, or 1/3 per hour.	Disputed	As claimed	8½ per day	Disputed	48
Saddle and Harness Makers	No information.	55/- per week.	Disputed	48/-	48	Agreed to	48
Marble and Slate Workers	No information.	Masons 1/3, polishers 1/-, machinists, 1/6½.	Disputed	As claimed	48	Disputed	48
Engineers— Fitters & Turners, Smiths, Copper-smiths, Brass Finishers, Pattern-makers, Planers, Boreers, Slotters, Millers, Drillers, other Machinists.	No information.	1/1½ to 1/5½ per hour.	Disputed.	Per hour: Fitters 1/4 Turners 1/4 Smiths 1/4 Copper-smiths 1/5 Brass Finishers 1/3½ Pattern-makers 1/5 Planers 1/1 Boreers, Slotters, & Millers 1/- Drillers 1/- Other Machinists 1/-	48	Agreed to.	48
Pressers	No information.	At per article (according to log). Journeymen £3 per week.	Majority of claim agreed to. Disputed.	At per article (log). £2/15/- per week or log rates.	48	.....	48
Painters	No information.	1/3 per hour.	Agreed to.	1/3 per hour	44	Agreed to conditionally.	44 and 48 conditionally.

were made Common Rules—*continued*.

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employees.
Claim.	Answer.	Award.				
No claim	.....	.....	Time and a quarter first 2 hours; time and a half after.	Conditional	.....	Trolley, Draymen, and Carters.
1 man 1 boy, 2 men 1 boy, up to 5 men 2 boys, 8 men 3 boys, and 1 boy for each additional 3 men or fraction.	Disputed	As claimed	Not less than 6d. per hour for first 2 hours, and 1/- per hour thereafter.	Conditional	.....	Brushmakers.
1 to 3	Agreed to	1 to 2 men, 1 to 3 according to branch of trade.	Time and a quarter; 8 p.m. to 8 a.m., time and a half; holidays and Sundays, double time	Conditional	.....	Saddle and Harness Makers.
1 to 4 masons and polishers.	Disputed	1 to 4 or fraction.	.....	Conditional	.....	Marble and Slate Workers.
1 to 3.	Disputed.	No limit.	Time and a half.	.....	.....	Engineers— Fitters & Turners, Smiths, Copper-smiths, Brass Finishers, Pattern-makers, Planers, Boreers, Slotters, Millers, Drillers, other Machinists.
1 to 3.	Disputed.	1 to first 3 or fraction, and then 1 to every 2 or fraction.	Time Workers: Time and a quarter. Piece Workers: 25 per cent. on piece work rates	.....	.....	Pressers.
1 to 4 or fraction.	Disputed.	No limit.	First 2 hours, time and a quarter; after, time and a half; and after midnight double rates.	.....	.....	Painters.

## B.—INDUSTRIES in which Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Employees of Australian Gaslight Company—							
Men in charge of Machinery.	.....	8/6 per shift	Disputed	* See Note.	8-hour shifts	.....	8-hour shifts.
Truck Fillers	.....	8/-	"	"	"	.....	"
Carbonizing Dept.	.....	9/6	"	"	"	.....	"
Yardmen	.....	7/6	"	"	"	.....	"
* From January 1 to December 31, 1905:—Firemen, 9/3 per day of 8 hours; Coke Trimmers, 8/3; Machine Men, 8/9; Oilhouse Operators, 8/9; Oilhouse Assistants, 8/-; Boilermen (Mortlake), 8/9; Drivers (Mortlake), 8/9; Sulphate Men, 7/9. From January 1, 1906, until expiration of Award:—Firemen, 9/6; Coke Trimmers, 8/6; Machine Men, 9/-; Oilhouse Operators, 9/-; Oilhouse Assistants, 8/3; Boilermen, 9/-; Drivers, 9/-; Sulphate Men, 8/- . During whole period of currency of Award:—Yardmen, 7/-; Coal Trimmers, 7/6; Boilermen, Sydney, 9/-; Drivers, Sydney, 9/-.							
Tanners, Curriers, and Leather-dressers—							
Curriers	45/-	50/- per week	45/-	45/-	48	48	48
Table hands	36/-	47/6	"	36/-			
Rollermen	41/-	48/-	"	40/-			
Beamsmen		42/-	"	42/-			
Unhairers and Scudders.	36/-	45/-	"	38/-			
Strikers	40/-	42/-	"	40/-			
Yardsmen, Sheds-men, and Lime Jobbers.	31/-	42/-	"	24/-			
Sydney and Manly Ferry Employees—							
Firemen	.....	56/-	48 6	50.9 per wk.	56 weekly	120 fortnight.	60 per week
Deck Hands, &c.	.....	42/-	35/-	36/-	60	"	} 120 per fortnight
Mates and Greasers	.....	49/-	Disputed	49/-	60	"	
Youths	.....	25/-	15/- to 25/-	15/- to 20/-	60	"	
Watchmen	.....	42/-	35/-	40/-	60	"	
Sydney Wharf Labourers (dispute with Inter-State and Coastal S.S. Owners' Associations).	.....	From 7 a.m. to 5 p.m., 1/3; overtime, 1/9; other rates, from 1.9 to 5/-	From 7 a.m. to 5 p.m., 1/-; overtime, 1/3; other rates, from 1.6 to 4/-	From 7 a.m. to 5 p.m., 1/1½; overtime, 1/4; other rates, 1/6 to 3/-	Ordinary, 8 a.m. to 5 p.m.; Saturday, 8 a.m. to 12 noon.	7 a.m. to 5 p.m., including Saturday.	7 a.m. to 5 p.m. daily.
Brewery Employees—							
Tower, Mill, and Tun-room Hands.	44/-	45/- per week.	Disputed.	(b) Tower, mill, and tun room hands, £2 4/- per wk.; cellar hands, 42/-; yardmen, 40/-; malt-hse. hands, 40/-; packers, 40/-; fillers and cokers, 36/-; brushers and shoters, 36/-; boys, 10/- per week, and 2/6 rise every 6 months.	Monday to Friday, 8½ hours per day; Saturday, 5½ hours. 48 hours in all.	Disputed.	(b) 48 hours per week, viz., Monday to Friday, 8½ hours per day; Saturday, 5½ hours.
Cask Washing or Soaking Hands, Yardmen.	42/-						
Bottlers, Corkers...	36/-						
Packers, Loaders ...	40/-						
Malthouse Hands...	40/-						
Wirers	.....	36/- per week.					
Bottle-washers	.....	42/-					
Head Storemen, Storekeepers, and Head Cellarmen.	42/-	60/-	"				
Storemen and Cellarmen.	42/-	45/-	"				
Boys	.....	10/-	12/5 per week and 2/6 rise every six months.				
Draymen	.....	43/- to 46/-	45/- to 55/- per week.	(c) 43/- and 46/-	54		58
Grooms	.....	40/-	42/- and 50/- per week.	40/- per wk.	57		58

were not made Common Rules.

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
.....	.....	.....	Sundays and holidays, time and a half.	Claimed ; opposed ; granted.	.....	Employees of Australian Gaslight Company— Men in charge of Machinery. Truck Fillers. Carbonizing Dept. Yardmen.
1 to 3, or fraction thereof.	Admitted	When 1 man only employed, 1 apprentice ; otherwise, 1 to 3	Time and a half ; Sundays, Good Friday, Christmas Day, and Eight-hour Day, double time.	Claimed ; opposed ; granted.	.....	Tanners, Curriers, and Leather-dressers— Curriers. Table Hands. Rollermen. Beamsmen. Unhairers and Scudgers. Strikers. Yardsmen, Shedsmen, and Lime Jobbers.
.....	.....	.....	Time and a quarter first 2 hours, time and a half thereafter for all hours over 70 in one week, or 120 in a fortnight.	Claimed ; opposed ; granted.	.....	Sydney and Manly Ferry Employees— Firemen.  Deck Hands, &c. Mates and Greasers. Youths. Watchmen.
.....	.....	.....	.....	Claimed ; opposed ; granted.	.....	Sydney Wharf Labourers (dispute with Inter-State and Coastal S.S. Owners' Associations).
6 to every 100 men or fraction thereof	Disputed.	(b) 4 to every 100 men or fraction thereof.	(b) Before or after hours, at ordinary rates. (c) Time and a quarter.	Agreed to.	Award made by consent.	Brewery Employees— Tower, Mill, and Tun-room Hands. Cask Washing or Soaking Hands, Yardmen. Bottlers, Corkers. Packers, Loaders. Malthouse Hands.  Writers.  Bottle-washers.  Head Storemen, Storekeepers, and Head Cellarmen.  Storemen and Cellarmen.  Boys.  Draymen.  Grooms.

## B.—INDUSTRIES in which Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Wire-netting Workers..	48/-	54/-	Disputed; piecework proposed.	(c) Time-work 1s. per hour; piecework as per specified scale.	48	Disputed; piecework proposed.	(c) 8 hours per day.
Undertakers— Shopmen ... .. Yard and Coachmen	45/- 30/-	50.- 45 -	47/6 45/-	47/6 45/-	54 60	55 66	51 60
Electrical Employees— Electrical Mechanics. Electrical Fitters... Armature Winders. Wiremen ... ..	..... ..... ..... ..... .....	10 - a day. 10/- " 10/- " 10/- "	Disputed. 10/- a day. Disputed. Disputed.	..... 10/- a day. 8/- " 9/- "	} 8 hours per day.	Admitted.	8 hours per day.
Tailoresses— Tailoresses ... .. Coat Machinists ...	20/- 25/-	20/- 25/-	20/- 25/-	20/- 23/6 and 25/-			
Tobacco Workers— Plug Coverers ...	.....	American leaf, present prices; Colonial work to be increased ½d. per lb.	} Objected to.	American leaf, present prices; Colonial leaf, an increase of ½d. per lb. all round.			
United Labourers' Protective Society.	No information.	See note *	Disputed.	See note †	8 hours per day.	Disputed.	8 hours per day.
Masters and Engineers' Association.	No information.	70/- per week	Disputed.	See note §	60	Disputed.	120 per fortnight.

\* Per day of 8 hours; rotary kiln burners, 10/-; lime kiln burners, 9/-; millers, 9/-; coal cracker greasers, 8/-; stone cracker feeders, 8/-; shale elevator feeder, 8/-; lime drawers lime kilns, 8/-; box fillers lime quarry, 8/-; spawling stone, 9/-; hammer and drill works, 9/-; machine drill, 9/-; labourers not already specified, 8/-.

† Per day of 8 hours; spawlers, 7/-; shunters, 7/-; mixers, 7/-; men at the shaking gutters ‡ at the rotary kilns, 7/-; men in the flying gang, 7/-; all other labourers included in the claim, 6/6.

‡ Time and a quarter the first two hours, time and a half thereafter. When in consequence of unforeseen cause to be paid for at ordinary rates, except continuous process work, time and a half.

§ As to men employed after award, masters and engineers, 60/- per week. —1st grade on boats to carry more than 800, and 2nd grade those on all other boats: End of each year 1st grade men to receive increase of 2/- per week, and 2nd grade not less than 1/- per week until they reach 70/- and 65/- respectively.

In service at the time of award, 1st grade, 62/- per week; 2nd grade, 61/- per week, and yearly increase of 2/- and 1/- per week till 70/- and 65/- reached.

were not made Common Rules—*continued.*

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
.....	.....	.....	.....	Agreed to.	(c) Award by consent.	Wire-netting Workers.
..... .....	..... .....	..... .....	Coachmen or Yardmen, 9d. per hour; Shopmen, 1/-; Sundays, Good Friday, Christmas Day, and annual picnic day, double time.	Agreed to.	Award by consent.	Undertakers—Shopmen. Yard and Coachmen.
1 to every 2 journeymen	Disputed.	1 to every 2 journeymen	First 2 hours, time and a quarter; time and a half thereafter. Sundays, time and a half if not part of employee's week's work. Holidays, time and a half.	Claimed; opposed.	.....	Electrical Employees—Electrical Mechanics. Electrical Fitters. Armature Winders. Wiremen.
2 to each tailoress.	2 to each tailoress.	2 to each tailoress.	Time and a half.	.....	Award by consent, with the exception of a few items in the piece-work log, disputed.	Tailoresses—Tailoresses. Coat Machinists.
.....	.....	.....	.....	Claimed; opposed.	.....	Tobacco Workers—Plug Coverers.
No claim.	.....	.....	See note ‡	.....	.....	United Labourers' Protective Society.
No claim.	.....	.....	Over 120 hours per fortnight receiving £3/5/- per week, 1/2 per hour; over £3/5/- per week, 1/3 per hour.	.....	.....	Masters & Engineers' Association.

## B.—INDUSTRIES in which Awards

Industry and Class of Employee.	Average Weekly Wage paid prior to Award.	Minimum Wage.			Hours.		
		Claim.	Answer.	Award.	Claim.	Answer.	Award.
Shore Drivers and Firemen (Breweries).	No information.	9/- per day of 8 hours.	Disputed.	8/- per day of 8 hours.	48	Disputed.	48
Shore Drivers and Firemen—Coal Mines—Caledonian Coal Company.	No information.	See note *	Disputed...	See note †	8	Disputed...	8 hours, exclusive of meal times, except where 3 shifts follow in 24 hours, when 8 hours, inclusive of meal time, shall constitute a shift.

\* Winding engine-drivers, 12/- per day of 8 hours; haulage engine-drivers with main, and main and tail rope, to be classed as 1st class engine-drivers, 11/- per day of 8 hours; firemen, 10/- per day; pumpers, 9/- per day.

† Engine Drivers per day, winding and locomotive, 11/-; haulage by main and main and tail rope, 10/-; fan and boilers, 8/9; fan and boilers, when winding material, 9/-; fan and boilers when winding men, 11/-; fan with electric generator or compressor, 9/-; endless ropes operating with clutches, 9/-; endless ropes with no clutches, 8/9; electric generator in excess of 150 h.p., 9/-; air compressor in excess of 150 h.p., 9/-; all engines under 150 h.p., 8/9.

were not made Common Rules—*continued.*

Apprentices.			Overtime.	Preference.	Remarks.	Industry and Class of Employee.
Claim.	Answer.	Award.				
No claim.	.....	.....	Time and a quarter.	Conditional	.....	Shore Drivers and Firemen (Breweries).
No claim	.....	.....	For the time ac- tually worked, at the same rate as is payable to the engine- driver working such overtime for ordinary work.	Condi- tional.	.....	Shore Drivers and Firemen. Coal Mines— Caledonian Coal Company.

## FOOD AND PRICES.

### FOOD SUPPLY.

THE soil of New South Wales is capable of producing in abundance most of the things essential to the sustenance of human life, and so far as actual necessities are concerned the State is not only practically independent of outside assistance, but is even in a position to export them in many instances. Considering the comparatively high rate of wages which prevails, food of all kinds is fairly cheap, and articles of diet which in other countries are almost within the category of luxuries are in New South Wales largely consumed even by the poorest classes. The main articles of consumption in the State are meat and bread.

The annual consumption per capita of the principal articles of diet, based on the average of the last three years, is as follows :—

Flour ... ..	...	...	...	...	233.1 lb.
Oatmeal ... ..	...	...	...	...	5.5 „
Rice ... ..	...	...	...	...	9.3 „
Meat { Beef ...	136.8 lb.	}	...	...	232.3 „
{ Mutton ...	81.0 „				
{ Pork, &c. ...	14.5 „				
Potatoes ... ..	...	...	...	...	157.5 „
Sugar ... ..	...	...	...	...	97.1 „
Butter... ..	...	...	...	...	25.1 „
Cheese... ..	...	...	...	...	3.4 „
Tea ... ..	...	...	...	...	7.2 „
Coffee ... ..	...	...	...	...	8.7 oz.
Cocoa and chocolate...	...	...	...	...	13.8 „

The average consumption of wheat exceeds  $5\frac{1}{2}$  bushels per head, so that about 9,500,000 bushels are required annually for home consumption as food. In addition there are the requirements for seed, &c., to be met, but the production is sufficient to cover the whole and leave a large surplus for exportation. The surplus, which varies with the seasons, has reached 10,464,000 bushels, but the annual average export since 1900 has been 5,517,000 bushels.

Oatmeal, corn-flour, and rice are the only other articles of cereal produce largely consumed. Rice is not grown in the State, being principally imported from Burmah, Straits Settlements, China and Java. Oatmeal has been extensively manufactured in the State for some years, but the actual output is not available as the industry is usually carried on in conjunction with others of a similar character.

The consumption of fresh meat, which would be considered enormous in other countries, is far below the average of earlier years. The chief cause of the diminished consumption was the sudden increase in prices during 1901, when the retail values rose 50 per cent. above those of the preceding year. As prices have never again fallen to their former level, being stimulated to a great extent by the large export trade which has grown up, a certain portion of the population has been unable to indulge in the former liberal consumption of animal food, and has substituted vegetables, and cereal foods. The requirements of the State for fresh food alone in 1907 were 362,000 head of cattle and 3,104,000 sheep.

The swine slaughtered during 1907 numbered 238,488. The quantity of bacon and hams made, according to the returns collected, was 10,358,526 lb., and the quantity imported for home consumption during the year was nearly 3,000,000 lb. The annual consumption of pork and its manufactured products is gradually increasing, and now averages about 14·5 lb. per inhabitant.

The consumption of potatoes is subject to considerable fluctuation. In 1904 it apparently amounted to 2,500,000 cwt., but fell to 1,740,000 cwt. in the succeeding year when prices became higher. The local production varies greatly, but is seldom equal to the demands upon it and the State is usually compelled to import largely from the neighbouring States.

Sugar is freely consumed, and although the average consumption has decreased by 10 per cent. within the last ten years, it reaches 97 lb. per head of population. The northern rivers district is well adapted to the growth of sugar-cane, and during the four years ended with 31st March, 1899, the average area cut was over 15,000 acres. With the growth of dairy-farming the industry has declined, and now only about 10,000 acres of cane are cut annually. The local mills produced 29,172 tons of sugar in 1907. The average production of the past five years has been 23,000 tons per annum, and as the total requirements of the State are about 65,000 tons an import of 42,000 tons is necessary each year.

The consumption of butter is increasing, and this is not surprising in view of the great improvement in the quality of the article, and its comparative cheapness. The whole of the butter and most of the cheese used are of local manufacture, and almost every year there is an increase in the quantity exported. The butter required for local consumption now exceeds 40,000,000 lb. per annum, while 5,300,000 lb. of cheese are necessary.

Tea enters largely into consumption, the average being slightly in excess of 7 lb. per head. The annual consumption of coffee is little more than half a pound per head.

The quantity of tobacco consumed in 1907 was 4,450,200 lb., the figures including tobacco, cigars, and cigarettes. This is equivalent to 2·86 lb. per inhabitant, and is a little below the average of 1906, which was 2·88 lb. per head. The consumption is, however, gradually increasing as ten years ago the average per head was just over 2½ lb., and from 1900 to 1904, not quite 2½ lb. per head. The consumption in 1907 was as follows:—

Description.	Consumption of Tobacco, 1907.			Per head of Population.
	Imported.	Australian.	Total.	
	lb.	lb.	lb.	lb.
Tobacco ...	472,600	3,135,100	3,607,700	2·32
Cigars ...	149,400	71,100	220,500	·14
Cigarettes ...	44,000	578,000	622,000	·40
Total ...	666,000	3,784,200	4,450,200	2·86

The expenditure on tobacco in 1907 amounted to £1,425,000, or 18s. 4d. per head of population.

In regard to the description of tobacco used there has been a great and, perhaps, unfortunate change during recent years, a noticeable feature being the large increase in the consumption of cigarettes. In 1890 about 88 per cent. of the total consumption was of ordinary tobacco, in 1907 the proportion had fallen to 81 per cent.; of cigars the consumption was about 8·5 per cent., compared with 5 per cent. at present; and of cigarettes 3·1 per cent. in 1890, compared with 14 per cent. in 1907.

## CONSUMPTION OF INTOXICANTS.

The volume of spirits consumed in the State during 1907 was 1,419,900 gallons, (proof) of which 224,100 gallons were Australian, and 1,195,800 gallons were imported. The average consumption, 0·91 gallon per head, was considerably above the average, as will be seen from the following table :—

Year.	Consumption of Spirits.		Year.	Consumption of Spirits.	
	Total.	Per Inhabitant.		Total.	Per Inhabitant.
	gallons (proof)	gallons.		gallons.	gallons.
1891	1,263,368	1·11	1902	1,260,438	0·90
1895	921,468	0·73	1903	1,127,222	0·79
1898	986,325	0·74	1904	1,126,400	0·78
1899	1,005,799	0·75	1905	1,131,500	0·77
1900	1,103,969	0·82	1906	1,163,600	0·77
1901	1,245,652	0·90	1907	1,419,900	0·91

The average consumption of beer per head of population has declined considerably since 1891, and in 1905 was lower than in any previous year for which information is available. In the following year it was practically the same, but in 1907 it rose to 9·79 gallons, the highest average consumption per head since 1902. The consumption of imported beer is becoming less, although not to the extent indicated in the table, as until the last six years the figures included the imports from the other Australian States :—

Year.	Consumption of Beer.			
	Locally brewed.	Imported.	Total.	Per Inhabitant.
	gallons.	gallons.	gallons.	gallons.
1891	10,594,000	2,464,000	13,058,000	11·43
1895	9,708,000	1,629,000	11,337,000	9·02
1898	11,533,000	1,574,000	13,107,000	9·91
1899	12,106,000	1,629,000	13,735,000	10·21
1900	13,274,734	1,618,966	14,893,700	11·00
1901	13,118,339	1,757,907	14,876,246	10·84
1902	13,441,275	1,121,277	14,562,552	10·45
1903	12,571,758	1,011,465	13,583,223	9·55
1904	12,079,400	940,900	13,020,300	9·00
1905	12,327,900	867,800	13,195,700	8·92
1906	12,716,800	812,400	13,529,200	8·93
1907	14,278,800	945,700	15,224,500	9·79

The consumption of beer and spirits can be determined accurately ; but as there is no excise duty on wine it is only possible to estimate the consumption on the basis of the production, and the results can hardly be regarded as satisfactory in view of the great variations shown by successive years.

The wine entering into consumption in New South Wales is chiefly the produce of Australian vineyards ; but the quantity produced in the State is much less than might be expected in a country so eminently adapted to

viticulture. The quantity of Australian and foreign wines consumed during each of the past ten years is shown below :—

Year.	Consumption of Wine.			
	Australian.	Foreign.	Total.	Per Inhabitant.
	gallons.	gallons.	gallons.	gallons
1891	788,038	173,541	961,579	0·84
1895	727,372	80,685	808,057	0·64
1898	771,214	76,918	848,132	0·64
1899	831,765	75,493	907,258	0·67
1900	816,908	87,026	903,934	0·67
1901	700,017	93,984	794,001	0·58
1902	851,539	167,921	1,019,460	0·73
1903	845,333	107,551	952,884	0·67
1904	941,100	40,500	981,600	0·68
1905	1,075,500	29,100	1,104,600	0·75
1906	1,094,600	39,400	1,134,000	0·75
1907	927,000	43,000	970,000	0·62

The consumption of alcohol will be seen from the following statement, which gives the average consumption of proof spirit per inhabitant during 1891, 1895, and each of the last ten years. In this statement the quantities of wine and beer consumed have been reduced to their equivalent of proof gallons of alcohol, this being a measure more easily understood, if less scientific, than that of absolute alcohol.

Gallons.				Gallons.			
1891	...	...	2·84	1902	...	...	2·45
1895	...	...	2·09	1903	...	...	2·20
1898	...	...	2·22	1904	...	...	2·11
1899	...	...	2·27	1905	...	...	2·11
1900	...	...	2·44	1906	...	...	2·12
1901	...	...	2·46	1907	...	...	2·34

In 1891 the consumption was 2·84 gallons per head. In 1907 it had fallen to 2·34 gallons, although the decline was not constant; in fact, 1907 showed the highest average since 1902, and a large increase over the three years 1904–6, when the consumption of intoxicants was at a minimum.

New South Wales compares favourably with other countries as regards the average consumption per head of population as will be seen from the following table. The figures are based on the latest available data :—

Country.	Consumption per Head of Population.		
	Spirits.	Wine.	Beer.
	galls.	galls.	galls.
United Kingdom	0·9	0·3	27·7
Canada	0·9	0·1	5·4
New Zealand	0·7	0·1	9·2
Denmark	2·4	...	20·5
Sweden	1·4	...	11·6
Belgium	1·1	1·0	48·8
Germany	1·4	1·6	26·3
France	1·4	33·9	7·5
Italy	0·3	18·5	...
United States	1·3	0·4	16·8
New South Wales	0·9	0·6	9·8

Denmark consumes more spirits per head than any other country, France more wine, and Belgium more beer.

## PRICES OF COMMODITIES.

The area of New South Wales is so extensive, and the population, except on the sea-board, so scattered, that the determination with any exactness of the average prices of the various commodities consumed is a difficult matter. No attempt has therefore been made to ascertain the average for the State, and in the following pages the prices refer to the Metropolitan markets alone.

The following table exhibits the average retail prices of eight standard commodities at intervals since 1870:—

Year.	Bread per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.	Cheese per lb.	Sugar per lb.	Tea per lb.	Potatoes per cwt.	Maize per bushel.
	d.	d.	s. d.	s. d.	d.	s. d.	s. d.	s. d.
1870	3½	3½	1 3	0 6	4	2 0	5 0	3 4
1875	3	3½	1 3	0 9	4½	1 9	5 6	4 3
1880	3	3½	0 10	0 7	4	2 0	4 3	2 6
1885	3	4½	1 9	1 0	3	1 9	5 6	3 11
1890	3½	4	1 0	0 8	3½	1 6	6 0	3 10
1895	2¾	3	1 0	0 8	2½	1 6	4 3	2 9
1900	3	3½	0 11	0 7½	2¼	1 4	6 9	3 0
1901	3	5	1 0	0 8	2¼	1 3	7 6	3 6
1902	3¼	6	1 2	0 10	2½	1 3	7 6	5 10
1903	3¼	5½	0 11	0 9	2½	1 3	5 10	4 6
1904	2¾	5	0 10½	0 8	2½	1 3	4 0	2 9
1905	2¾	5½	1 1	0 8	2½	1 3	10 6	4 0
1906	2¾	5½	1 1	0 8½	2½	1 3	10 6	3 9
1907	3	5	1 1	0 8	2½	1 3	4 6	3 10

While these tables are useful for comparative purposes, and most instructive in regard to the cost of living during the period over which they extend, the figures do not disclose the most interesting feature in a history of prices, namely, the range which occurs during the year. The variation is most noticeable in the case of perishable produce.

Potatoes show remarkable fluctuations. The lowest average since 1870 for a whole twelvemonth was 3s. 6d. per cwt. in 1873; and the highest (10s. 6d.) in 1905 and 1906, when the price of potatoes was higher than at any previous period since 1858.

\* In the list are included quotations for bread at per 2-lb. loaf. In most years the price varied somewhat regularly with that of wheat, although there are exceptions to this rule. In recent years inferior bread has been sold for 2d. per loaf, but the usual price is from 2½d. to 3d. per loaf.

In addition to the eight commodities which are given in the above statement, the following list of the average retail prices of articles largely used is of interest:—

Year.	Bacon per lb.	Eggs per doz.	Rice per lb.	Oat- meal per lb.	Coffee per lb.	Salt per lb.	Beer (col.) per gal.	Soap per lb.	Starch per lb.	Tobacco per lb. (col.)	Tobacco per lb. (imp.)
	s. d.	s. d.	d.	d.	s. d.	d.	s. d.	d.	s. d.	s. d.	s. d.
1870	0 10½	1 4	3	4	1 2	1	1 4	4	0 7	1 3	3 6
1875	0 9½	1 6	3	3	1 2	1½	3 0	3	0 5	2 0	3 9
1880	0 7½	1 4	3	3	1 5	0¾	2 0	3	0 5½	2 0	4 0
1885	0 10½	1 10	3	3	1 5	0¾	2 0	3	0 6½	3 0	6 0
1890	1 0½	1 6	4	3	2 0	1	2 0	3½	0 5	4 0	6 0
1895	0 7½	1 0	2½	2	1 9	0¾	2 0	2	0 4	4 0	6 0
1900	0 7½	0 11	2¼	2¼	1 6	0½	2 0	3	0 3½	4 0	6 0
1901	0 8½	1 3	2½	2½	1 6	0½	2 0	3	0 4	4 0	6 0
1902	0 10	1 6	2½	2¼	1 6	0½	2 0	3	0 4	4 0	6 0
1903	0 10	1 6	3	2½	1 6	0¾	2 0	4	0 5	4 0	6 0
1904	0 8	1 0	2½	2½	1 6	0¾	2 0	4	0 5	4 0	6 0
1905	0 9	1 0	2½	2½	1 6	0¾	2 0	3½	0 5	4 3	6 0
1906	0 9½	1 1	2½	2½	1 6	0¾	2 0	3½	0 5	4 3	6 0
1907	0 10	1 0	2½	2½	1 6	0¾	2 0	4	0 5	4 0	6 0

In the above quotation of prices the figures are those charged in the shops throughout the metropolitan district. It is quite possible that produce of all kinds may have been bought at cheaper rates than those stated; but the figures will be found to represent the fair average rates, having regard to the class of goods consumed. A mere consideration of prices, however, gives but little idea of the change in the economic condition of the people, for the great improvement in the quality of the articles should also be taken into account.

## WHOLESALE PRICES.

The average wholesale prices of the principal kinds of farm and dairy produce are given in the following statement for the seven years, 1901 to 1907. The average for the year represents the mean of the prices ruling during each month, and does not take into account the quantity sold during the month. The figures are those quoted by the middleman and not those obtained by the producers:—

Farm and Dairy Produce.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat ... bush.	0 2 8	0 4 5	0 5 1 $\frac{3}{4}$	0 3 2 $\frac{1}{2}$	0 3 5	0 3 3	0 3 10
Flour ... ton	6 6 4	9 8 9	12 6 0	9 19 0	7 19 6	7 11 6	8 15 0
Bran ... bush.	0 0 8 $\frac{1}{2}$	0 1 3 $\frac{3}{4}$	0 0 11 $\frac{1}{2}$	0 0 6 $\frac{1}{2}$	0 0 9 $\frac{1}{2}$	0 0 9 $\frac{3}{4}$	0 0 11 $\frac{1}{2}$
Pollard ... „	0 0 9 $\frac{1}{4}$	0 1 4 $\frac{1}{2}$	0 1 2	0 0 7 $\frac{1}{4}$	0 1 0 $\frac{1}{4}$	0 0 10 $\frac{1}{4}$	0 0 11 $\frac{1}{2}$
Barley ... „	0 2 2 $\frac{1}{2}$	0 3 9 $\frac{3}{4}$	0 3 11	0 2 2 $\frac{1}{2}$	0 2 8 $\frac{1}{2}$	0 3 5 $\frac{1}{2}$	0 3 5
Oats ... „	0 2 3 $\frac{3}{4}$	0 3 5	0 2 7 $\frac{1}{2}$	0 2 2 $\frac{1}{2}$	0 2 7 $\frac{3}{4}$	0 2 10 $\frac{1}{2}$	0 2 10
Maize ... „	0 2 8 $\frac{1}{2}$	0 4 10	0 3 7 $\frac{3}{4}$	0 2 2	0 3 2 $\frac{3}{4}$	0 3 0	0 3 2 $\frac{1}{2}$
Potatoes... ton	5 1 3	6 10 6	4 5 0	3 8 9	7 7 6	7 10 0	3 5 0
Onions ... „	9 0 6	6 4 0	3 18 6	3 10 3	14 8 3	6 9 0	4 8 3
Hay—							
Oaten or							
Wheaten „	3 15 0	6 0 0	4 19 6	2 19 6	3 5 9	3 12 0	4 6 6
Lucerne ... „	2 11 10	5 14 10	3 14 0	2 6 3	3 0 10	3 17 0	4 19 0
Straw ... „	1 18 3	3 1 0	2 16 6	1 19 0	1 14 3	2 4 0	2 19 0
Chaff ... „	3 10 6	5 6 9	5 3 9	3 6 0	3 11 3	3 13 6	4 8 0
Butter ... lb.	0 0 10 $\frac{1}{4}$	0 1 2 $\frac{1}{2}$	0 0 11	0 0 8	0 0 10	0 0 10	0 0 9 $\frac{3}{4}$
Cheese(loaf) „	0 0 5 $\frac{1}{2}$	0 0 8	0 0 7	0 0 4 $\frac{3}{4}$	0 0 6 $\frac{1}{2}$	0 0 6	0 0 6 $\frac{3}{4}$
Bacon ... „	0 0 7	0 0 9	0 0 9	0 0 7	0 0 6	0 0 7	0 0 8 $\frac{1}{2}$
Eggs ... doz.	0 0 11 $\frac{1}{2}$	0 1 2 $\frac{1}{4}$	0 1 2 $\frac{1}{2}$	0 1 0 $\frac{1}{4}$	0 0 10 $\frac{1}{4}$	0 0 11	0 1 0 $\frac{1}{2}$
Poultry—							
Fowls ... pair	0 3 3	0 3 8	0 4 0	0 3 6	0 2 8	0 3 3	0 3 9
Ducks ... „	0 3 1	0 3 7	0 4 0	0 3 3	0 2 6	0 3 3	0 3 0
Geese ... „	0 5 2	0 6 3	0 6 5	0 5 9	0 4 6	0 5 3	0 5 9
Turkeys.. „	0 11 0	0 11 6	0 12 3	0 10 6	0 12 0	0 11 6	0 11 9
Bee produce—							
Honey ... lb.	0 0 2 $\frac{1}{4}$	0 0 3	0 0 3	0 0 2 $\frac{1}{2}$	0 0 2 $\frac{5}{8}$	0 0 3 $\frac{1}{4}$	0 0 3
Wax ... „	0 1 1	0 1 1	0 1 1	0 1 1 $\frac{1}{4}$	0 1 1 $\frac{1}{2}$	0 1 2	0 1 3 $\frac{1}{2}$

The figures call for little comment beyond the caution already given in regard to the prices of commodities generally—that the averages are irrespective of the quantities sold. As regards most of the articles in the list, the lower the price the larger the consumption. The exception to this rule is poultry, which is most in demand before the Christmas season, when prices are correspondingly high.

For locally grown wheat the quotations during 1907 ranged from 2s. 4 $\frac{1}{2}$ d. in January to 5s. 1 $\frac{1}{2}$ d. in October. Barley and oats are for the most part imported, and the prices of these cereals during the year call for little notice. Maize, on the contrary, is largely of local growth, and its price varied from

2s. 6d. in March to 4s. 10d. in December. Prices for the various kinds of fodder increased considerably during the year, especially during the last three months. Root crops show very great range. Thus, potatoes varied between £2 in July and £5 15s. per ton in January; and onions sold for £7 5s. per ton in October, as against £3 2s. 3d. in May.

The prices of the items set forth in the tables just given are determined by the local demand, wheat, of course excepted, its price being fixed by that ruling in the markets of the world.

The prices of pastoral and other primary produce, which form so large a proportion of the exports of the State, are not sensibly affected by local consumption, but are established by the prices ruling in London. In the following table are given for five years the Sydney f.o.b. prices of the principal pastoral products :—

Pastoral Produce.	1903.	1904.	1905.	1906.	1907.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Beef ... .. lb.	0 0 2	0 0 1½	0 0 2	0 0 1¾	0 0 2
Mutton ... .. "	0 0 2	0 0 2½	0 0 2½	0 0 2½	0 0 2
Wool—Greasy ... .. "	0 0 9½	0 0 9	0 0 9½	0 0 10½	0 0 11½
Scoured ... .. "	0 1 6½	0 1 6½	0 1 6½	0 1 8	0 1 9
Sheepskins—with Wool ... bale	19 0 0	19 6 0	23 10 0	30 10 0	28 8 4
Hides ... .. each	1 0 3	1 1 10	1 5 0	1 7 6	1 6 4
Leather ... .. bale	32 0 0	29 10 0	32 3 4	35 10 0	34 10 0
Hair ... .. lb.	0 1 1½	0 1 3	0 1 6½	0 1 11	0 1 7½
Bones ... .. cwt.	0 6 7	0 6 3	0 7 8	0 8 8	0 7 11½
Horns ... .. 100	1 12 10	1 13 4	1 11 8	1 15 2	1 13 9
Hoofs ... .. cwt.	0 5 10	0 8 3	0 8 10	0 8 3	0 6 7
Tallow ... .. "	1 5 1	1 1 10	1 2 6	1 4 9	1 11 3½
Glue-pieces ... .. "	0 8 10	0 11 6	0 8 4	0 10 3	0 9 6

Leather is included as a pastoral product, although it might be reckoned as a manufactured article. Wool, the staple product of the State, continued to bring high prices throughout the year, and in December the average selling price for greasy wool was 12d. per lb. The prices of the other articles were also well maintained throughout the year. Sheepskins were nearly 25 per cent. higher than in 1905, and are now worth almost twice as much as in 1901. Greasy wool and scoured wool were over 50 per cent. higher than in 1901.

The next table shows the Sydney f.o.b. prices of the principal metals and of coal produced in the State. These, like the pastoral products, are not affected by the local demand, but depend upon the prices obtained in the world's markets :—

Metals.	1903.	1904.	1905.	1906.	1907.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Silver ... .. oz.	0 2 0½	0 2 1½	0 2 3½	0 2 6½	0 2 6
Copper ... .. ton	55 1 8	55 18 4	66 18 4	85 10 0	85 2 4
Tin ... .. ton	124 13 4	123 16 8	141 0 0	178 18 4	170 9 7
Lead ... .. ton	10 15 0	11 0 0	12 13 4	16 10 0	18 10 6
Coal ... .. ton	0 10 1	0 9 5	0 8 4	0 8 9	0 9 10

With the exception of tin the values of the industrial metals were maintained during 1907.

## HOUSE RENTS.

The rents paid for dwellings form a large deduction from the earnings of the manual labour class in any community. In the city of Sydney and suburbs, dwellings occupied by the labouring classes yield rents as follows :— Three rooms, from 8s. to 10s. per week ; four rooms, from 10s. to 12s. per week ; and five rooms, 12s. to 15s. per week. Dwellings of more than five rooms are seldom occupied by labouring-class families, unless there are adult sons and daughters who contribute to the family earnings. The rents vary in the suburbs in accordance with the class of people which constitutes the population ; in several of the more recently developed localities it is impossible to obtain dwellings under 12s. 6s. per week, as builders and house agents do not seek to encourage the immigration of the poorer classes to these localities.

Speaking generally, the deduction from a labourer's income for rent exceeds 25 per cent., which, from whatever point it is viewed, must be regarded as excessive.

## PRODUCTION FROM ALL INDUSTRIES.

In other chapters of this work details have been given of the various producing industries, and in the following table they have been grouped together so that a clear idea may be gathered of their relative importance in adding to the national wealth. To extend the comparison, the figures for the last two years are shown in conjunction.

As previously stated, the figures show the actual value received by the producers at the place of production, and in the manufacturing industry they represent the value added to raw materials by the processes of treatment, not the value of articles manufactured or work done :—

Industry.	Value of Production.			
	1906.		1907.	
	Total.	Per head of Population.	Total.	Per head of Population.
	£	£ s. d.	£	£ s. d.
Manufacturing and allied processes..	11,906,000	7 17 3	13,481,000	8 13 5
Agriculture ... ..	7,518,000	4 19 3	6,588,000	4 4 9
Dairying ... ..	3,425,000	2 5 3	3,567,000	2 5 11
Pastoral industry ... ..	19,743,000	13 0 9	22,281,000	14 6 7
Mineral production ... ..	7,913,000	5 4 6	10,295,000	6 12 5
Forestry and fisheries ... ..	1,536,000	1 0 4	1,382,000	0 17 9
Minor industries (poultry, bees, rabbits, &c.) ... ..	1,693,000	1 2 4	1,708,000	1 2 0
Total ... ..	53,734,000	35 9 8	59,302,000	38 2 10

The total value of production during 1907 reached the very satisfactory total of £59,302,000. This sum is far in advance of the total of any former year, being £5,568,000 in excess of the value for 1906, which had hitherto been the highest on record. The pastoral industry has for many years been the chief source of the wealth of the State, but this is the first occasion on which its production has exceeded 20 millions sterling.

The statement below shows the estimated value of production of the various industries since 1891, and the equivalent values per head of population. The figures are not exact, but are considered the best approximations from the data available:--

Year.	Pastoral.	Agricultural.	Dairying.	Mining.	Other Primary.	Manu- facturing.	Total.
Value of Production. ( <i>In thousands, 000 omitted.</i> )							
1891 ...	£ 14,725	£ 3,615	£ 2,735	£ 6,434	£ 758	£ 7,799	£ 36,066
1894 ...	11,168	3,439	2,518	4,947	690	6,880	29,672
1895 ...	11,774	4,101	2,546	4,499	715	7,006	30,641
1896 ...	11,774	5,374	2,546	4,465	715	7,302	32,176
1897 ...	11,823	6,250	2,653	4,616	750	8,079	34,171
1898 ...	13,219	4,875	2,758	4,756	800	8,425	34,833
1899 ...	14,527	5,609	2,543	5,960	639	9,207	38,485
1900 ...	13,707	5,856	3,617	6,362	796	9,656	39,994
1901 ...	12,552	7,060	3,046	5,681	733	9,740	38,812
1902 ...	10,731	4,139	3,403	5,102	695	10,000	34,070
1903 ...	12,777	8,359	3,276	5,958	779	9,600	40,749
1904 ...	13,373	5,414	2,753	6,243	1,699	9,908	39,390
1905 ..	17,113	6,543	3,123	6,897	2,418	10,631	46,725
1906 ...	19,743	7,518	3,425	7,913	3,229	11,906	53,734
1907 ...	22,231	6,588	3,567	10,295	3,080	13,481	59,302

## Value Per Head.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1891 ...	12 17 10	3 3 4	2 7 11	5 12 8	0 13 3	6 16 7	31 11 7
1894 ...	9 2 1	2 16 1	2 1 6	4 0 7	0 11 3	5 12 2	24 3 8
1895 ...	9 8 3	3 5 7	2 0 9	3 11 11	0 11 5	5 12 0	24 9 11
1896 ...	9 5 4	4 4 7	2 0 1	3 10 4	0 11 3	5 14 11	25 6 6
1897 ...	9 3 3	4 16 10	2 1 2	3 11 7	0 11 7	6 5 3	26 9 8
1898 ...	10 1 6	3 14 3	2 2 0	3 12 6	0 12 2	6 8 5	26 10 10
1899 ...	10 17 11	4 4 2	1 18 2	4 9 3	0 9 7	6 18 1	28 17 2
1900 ...	10 2 5	4 6 6	2 13 5	4 13 11	0 11 9	7 2 7	29 10 7
1901 ...	9 3 6	5 3 3	2 4 6	4 3 1	0 10 9	7 2 5	28 7 6
1902 ...	7 13 10	2 19 4	2 8 9	3 13 2	0 9 11	7 3 4	24 8 4
1903 ...	9 0 0	5 17 9	2 6 2	4 3 11	0 11 0	6 15 3	28 14 1
1904 ...	9 4 11	3 14 10	1 18 1	4 6 4	1 3 6	6 17 0	27 4 8
1905 ...	11 11 6	4 8 6	2 2 3	4 13 4	1 12 8	7 3 9	31 12 0
1906 ...	13 0 9	4 19 3	2 5 3	5 4 6	2 2 8	7 17 3	35 9 8
1907 ...	14 6 7	4 4 9	2 5 11	6 12 5	1 19 9	8 13 5	38 2 10

Prior to 1904 the production of poultry and bees was included with Dairying, but has since been included in other Primary industries.

Variations in prices and the conditions of the seasons are both powerful factors in regulating production; but, making allowance for these, there has been a steady advance in all directions throughout the period covered by the above table.

The following table shows the total value of production in various years from 1871 onwards, together with the return per head of population:—

Year.	Value of Production.	Value per head of Population.
	£	£ s. d.
1871	15,379,000	30 5 3
1881	25,180,000	32 18 3
1891	36,066,000	31 11 7
1901	38,840,000	28 7 6
1906	53,734,000	35 9 8
1907	59,302,000	38 2 10

These figures show that since 1871 the volume of production has increased by nearly 44 millions, and the value per head of population by nearly £8. From the primary industries alone the return in 1907 was £45,821,000, equal to £29 9s. 5d. per head, or what is perhaps a better standard, £147 12s. 8d. per square mile. This is the highest return yet received from the primary industries, and is a magnificent testimony to the wealth of the State, and the bountiful returns which it yields under favourable conditions. The figures are unsurpassed by any country outside Australasia, and afford ample justification for the investment of the capital which has secured such results.

## LOCAL GOVERNMENT.

NEW South Wales was slow to adopt a general system of local government, as until 1906 less than one per cent. of its area was incorporated.

In 1894 a Bill was submitted to the Legislative Assembly, providing for the incorporation of the entire unincorporated area of the State into boroughs, municipal districts, and shires; but in consequence of the insertion in the Bill of a clause which they considered contrary to a vital principle the measure was abandoned by the Government. Other measures were introduced from time to time with no better result, and it was not till the years 1905 and 1906 that the Government was successful in passing legislation which gave the State full local government.

The Act in 1842 by which the City of Sydney was incorporated contained no provision for the extension of the municipal principle to other localities; but in 1843 the first step was taken towards the extension of the system to the country districts by the incorporation, under letters patent, of Campbelltown, Appin, Camden, Narellan, and Picton, as one District Council, which was afterwards, in the course of the same year, under a special Act, subdivided into two by the formation of Campbelltown and Appin into separate Councils.

In 1844 the number of country District Councils had increased to eight, and these, in conjunction with the Municipal Council of Sydney and the Road Trusts, subsequently established, constituted the whole of the local government system prior to 1858. In this year the first important measure relating to general municipal government was enacted. An Act was passed, making provision for dissolving, if necessary, the District Councils, and placing the area controlled by them under municipal bodies. Under its authority thirty-five districts were incorporated, which, with the exception of Cook, joined to Camperdown in 1870, and East St. Leonards, subsequently united to St. Leonards, still exist, although the boundaries of nearly one-half have been altered. Under the Act of 1858, the municipal council was elected by the ratepayers, and its most important functions were to make by-laws for the good government of the municipality; to control roads, bridges and ferries; and to remove nuisances. The general rate could not exceed one shilling in the £, but a special rate for water supply, sewerage and street lighting could be levied. Endowment by the Government was provided for, to endure for fifteen years, and to be based on the amount of general rates actually collected.

No district, however populous, was compelled to become incorporated, and it was only on the presentation of a petition, signed by at least fifty of the prospective ratepayers, and containing a larger number of signatures than those attached to any counter petition, that a municipality could be formed.

The Act of 1858 was repealed in 1867 by the Municipalities Act passed in that year. Under this Act the thirty-five existing municipalities were to continue as boroughs, and all areas incorporated in the future were to be classified either as boroughs or municipal districts. Boroughs could include any city, town, or suburb of the metropolis, or any populous country district, but must have a population exceeding 1,000 and an area of not less than 9 square miles. Municipal districts could include any area not containing a borough, but must have a population of not less than 500 and an area of not more than 50 square miles.

The powers of the councils were extended slightly, and the rate remained as before. It was still left optional for any district to incorporate, and consequently local government was not generally adopted.

The Municipalities Act of 1897 consolidated the previous Acts and amending Acts which had been passed from time to time, but did not alter their principles. The voluntary principle of incorporation which was retained was not conducive to the adoption of a general system of local government, as it was natural that so long as the central Government continued to construct local works, so long would the persons benefited submit to the absence of local management of their affairs.

The Shires Act, passed at the close of the year 1905, provides for the compulsory division of the State, with the exception of existing municipalities, the whole of the Western Division, the quarantine station, Lord Howe Island, and the islands in Port Jackson, into local government areas, to be called shires. A sum of not less than £150,000 is to be paid as endowment annually from the Consolidated Revenue Fund, in the following proportions, viz:—First-class shires, from nil up to 10s. per £; second-class, 15s. per £; third-class, 20s.; fourth-class, 25s.; fifth-class, 30s.; and sixth-class, 40s. or more. These endowments are payable on the amount of general rates received during the preceding year, but if the necessities of the shire do not warrant an endowment, it will not be paid. The endowment is to be fixed triennially, according to the extent and revenue and expenditure of the shires.

The councils may exercise the following powers:—The care, control, construction, fencing, and maintenance of all public places generally, except those vested in the Railway Commissioners, or other public bodies, or trustees, and except national works; regulation of traffic; street and road lighting; prevention of bush fires; flood relief and prevention; construction and maintenance of streets, jetties, wharves, and buildings for the transactions of business; and the administration of the Impounding and Public Watering Places Acts. Other powers may be acquired from time to time if a majority of the council decides that they are necessary for the good government of the shire. These are prevention of nuisance; water supply; regulation and licensing of public vehicles and hawkers; management of parks and commons; and the administration of the Public Gates Act and the Native Dog Destruction and Poisoned Baits Acts.

The shires are to be divided into ridings, each riding having equal representation on the council. The members are to be called councillors, and one is to be elected president by the members. All owners and occupiers of rateable property of the annual value of not less than £5, over 21 years of age, male and female, unless not naturalised, are entitled to be entered on the electors' roll, and any male person enrolled is qualified to be nominated as a councillor. The usual conditions as to disqualification are provided for, and also the penalties for acting while not being properly qualified.

An important provision in the Act is that the rates are to be charged on the unimproved value of the land, and not on the annual rental. The rate to be levied must be not less than one penny, nor more than two-pence in the £, unless the minimum rate is more than sufficient to meet the requirements of the shire, in which case representations may be made to the Governor, who may at his discretion permit a rate of less than 1d. to be levied. The rateable value of coal mines is fixed at 50 per cent. of the gross value of the average annual output for the preceding three years, and of other mining properties at 40 per cent. for the same period. The minimum rate in respect of any portion of land is fixed at 2s. 6d. Another important feature of the Act is that when the council imposes a rate of 1d. in the £ on the unimproved capital value the operation of

the Land Tax Act is suspended. The properties exempt from taxation are:—Commons, parks, cemeteries, hospitals, benevolent institutions, churches, free public libraries, and unoccupied Crown lands.

As already mentioned, amending Bills were introduced at various times, notably in 1894 and 1901; but in 1906 a very comprehensive measure, the Local Government Extension Act, was passed by Parliament.

The first important provision is that for the establishment of cities. The Governor may proclaim as a city, any municipality which has had, during the preceding five years, a population of at least 20,000 persons and a revenue of £20,000, and is an independent centre of population. During the year 1907 the municipality of Broken Hill was proclaimed a city, in accordance with the Act.

It is also enacted that all municipalities not receiving statutory endowment under the existing Act, if found on investigation to be in necessitous circumstances, shall be entitled to a sum not exceeding 3s. 4d. in the £ on the general rate collected; but if the revenues are sufficient to meet the reasonable requirements under proper management of the corporations, no endowment will be paid.

The rates will be levied on the unimproved value, at an amount to be fixed per £, which must be not less than 1d., but if this rate is more than sufficient to meet the requirements of the municipality it may be reduced. A Council which has levied the general rate of 1d. on the unimproved value may impose such additional rate as may be required either on the improved or unimproved value. Special, local, and loan rates may also be imposed either on the improved or unimproved value at the option of the Council. The conditions as to ratable value are similar to those of the Shires Act, and electors will be enrolled on the same franchise as exists under the Act mentioned.

Other important provisions are the power to borrow up to 10 per cent. of the unimproved value, such loans to be guaranteed by the Government; the redistribution and reconstruction of existing areas, so that the municipalities may form portions of shires; the acquisition of land and works; control of cattle-slaughtering and public health; dealing with noxious animals and plants; safety of the public; regulation of hoardings and other structures. The Governor may proclaim any park, road, bridge, or other public work to be a national work which will be maintained by the State, but which may be handed over to the Council at any time. Auditors will in future be appointed, not elected, and Government examiners are to be appointed to inspect the accounts.

The Local Government Act of 1906, passed towards the end of that year, deals fully with both Shires and Municipalities, and came into operation on 1st January, 1907. It repeals the Shires Act of 1905 and the Local Government Extension Act of 1906, and consolidates their provisions.

Before the Local Government Act of 1906 came into operation, a very insignificant portion of the State had been incorporated, as will be seen in the statement below, which gives the area incorporated and unincorporated in 1906 in the three great land divisions of the State:—

Division.	Incorporated.	Unincorporated.	Total.
	sq. miles.	sq. miles.	sq. miles.
Eastern ... ..	1,977	93,742	95,719
Central ... ..	571	88,579	89,150
Western ... ..	282	125,216	125,498
Total ... ..	2,830	307,537	310,367

On the 31st December, 1907, the area incorporated was as follows, the only part of the State unincorporated being that portion of the Western Division not included in Municipalities. The population in the different groups is also given:—

	Area (sq. miles).	Population.
In Metropolitan Municipalities...	149	577,180
In Country Municipalities	2,851	433,470
In Shires	182,110	542,800
Total (incorporated)...	185,110	1,553,450
Western Division (portion unincorporated)	125,257	19,774
Total	310,367	1,573,224

#### INCORPORATION OF THE CITY OF SYDNEY.

The City of Sydney was incorporated on the 20th July, 1842, and the Sydney Municipal Council was established during the same year, the election of aldermen taking place on the 9th November. Mr. John Hosking was the first Mayor. The city was originally divided into six wards, but at a subsequent adjustment the number was increased to eight.

After a few years great dissatisfaction arose in the minds of the citizens in regard to the manner in which the affairs of the Corporation were carried on. A Select Committee of the Legislative Council was appointed in 1849 to inquire into the matter, and reported in favour of the abolition of the Municipal Council, with a recommendation that its powers should be vested in three Commissioners. This was not carried into effect until 1853, when the Corporation was dissolved, and its authority was transferred to a Commission, consisting of Messrs. G. Elliott, J. Rae, and F. Darvall, who administered the affairs of the city from the beginning of 1854 to the end of 1857. A new Council came into existence at the commencement of 1858. Mr. George Thornton was the first Mayor under the changed order of things, and there were sixteen aldermen—two for each ward. By the Sydney Corporation Act of 1879 the number of aldermen was increased to twenty-four, and each ward had three representatives.

Towards the close of 1900 an Amending Act was passed, dividing the city into twelve wards, each returning two aldermen. The innovation of retiring the whole of the aldermen simultaneously was introduced by providing for the election of a new Council on the 1st December in every second year, re-election of qualified persons being, of course, permitted. A candidate is debarred from expending more than £50 in his endeavour to obtain a seat in the Council. The penalty for exceeding that amount is a fine of £20; and, in the case of an elected candidate, the election is to become void. Another change brought about by the Act is the enfranchisement of sub-tenants and lodgers. Power is given also to the Council to resume land required for opening or enlarging streets and other public places.

The Sydney Corporation Act of 1902 consolidated the statutes previously passed relating to the City of Sydney.

In 1905 a further Amending Act was passed to provide for the better government of the city, especially with regard to the control of hoardings, the proper cleansing of footways, the prevention or regulation of the smoke nuisance from furnaces and chimneys, the regulation and control of refreshment stalls and stands, the control of juvenile hawkers and shoe-blacks, and the prevention of betting in public places.

The Act also regulates the election of the city members of the Metropolitan Board of Water Supply and Sewerage, and the Fire Brigades Board, and extends the power of the Council as regards resumptions, in order to

provide workmen's dwellings, and further provision is made for the extension of the city boundaries. Elections were ordered to be held every three years, instead of two.

In 1908 an Amending Act was passed, containing several important provisions, among which was one that the rates might be levied on the unimproved capital value of land, and that thereupon the land tax should be suspended. The Municipality of Camperdown was amalgamated with the City of Sydney as from the 1st January, 1909. The Council were given power to establish public libraries and milk depôts. They were also given control of certain parks, and power to widen Elizabeth and Liverpool streets.

#### MUNICIPALITIES.

The Sydney Corporation Act of 1902 directs that improved property within the city shall be assessed at the fair average annual value, with an allowance for outgoings not exceeding 10 per cent., and the unimproved property at a maximum of 6 per cent. on its capital value, and on the value of such assessment a city rate not exceeding 2s. in the £ may be levied, exclusive of lighting. The rate stood at 16d. from 1891 to 1899, but was increased to 18d. for 1900, and 24d. for 1901. In 1902, it was reduced to 22d., and still further reduced to 21d. in 1903, which was also levied from 1904 to 1907. This is the only rate at present in force. The Act provides for a special local rate not exceeding 6d. in the £ of annual value, for any work which may be for the particular benefit of one locality, but then only if two-thirds of the ratepayers of such locality petition for the same. Occasional advantage of this power has been taken for street-watering, though not of late years, and the amount now levied covers the expenses of street-lighting and street-watering.

The other Councils were empowered to raise revenue by rates not exceeding 1s. in the £ for ordinary purposes and the same amount for special purposes, with 6d. in addition for street-watering. The amount of each rate was calculated upon nine-tenths of the fair average annual rental of all buildings and cultivated lands, or lands let for pastoral, mining, or other purposes, and upon 5 per cent. of the capital value of the fee-simple of all unimproved lands.

During the municipal year ending first Monday in February, 1908, the maximum rate of 1s. in the £ was levied in all the suburban and country municipalities, with the exception of Carcoar and Cooma, which imposed 11d., Junee and Wallendbeen, which imposed 10d., Cudal, which imposed 9d., Barraba and Granville, which imposed 8d. In Eastwood and Homebush, the rate of 12d. included the cost of lighting the borough by gas, and in a few country municipalities the cost of street lighting was also paid out of the general rate. There were 110 municipalities where lighting rates were imposed ranging from 2d. to 6d. in the £ for gas, 2d. to 8d. for electric light, and 1d. to 6d. for oil lamps. In only 40 municipalities, exclusive of those supplied by the Metropolitan and Hunter District Water and Sewerage Boards, was there a water rate, ranging from 6d. to 2s. in the £. In 22 cases out of the 40, or more than half, the rate was struck at 1s. in the £, and only in one instance was the maximum of 2s. imposed. Other special rates mostly for street-watering and sewerage, were levied in some of the municipalities. Only two districts, Broken Hill ( $\frac{1}{2}$ d.) and Kempsey ( $\frac{1}{4}$ d.), levied a library rate—reading facilities being afforded without charge by the local Council in many other towns, or, on payment, by the local School of Arts or Mechanics' Institute; while fire brigade rates, ranging from  $\frac{1}{2}$ d. to 1d., were levied in 28 municipalities. Four of the municipalities levied sewerage rates, viz., Hay and Lismore each 1s., Narrandera 8d., and Newcastle 2d. in the £.

Municipalities which avail themselves of the provisions of the Country Towns Water and Sewerage Act of 1880 are empowered to levy a rate for each service not exceeding a maximum of 10 per cent. on the assessed value of land and tenements, in addition to the ordinary municipal rates. On the 30th June, 1908, there were 40 municipalities with water-works constructed under the provisions of the Act, and 8 with sewerage works, but the water-works at Manly, Richmond, and Wollongong were subsequently transferred to the control of the Metropolitan Board of Water Supply and Sewerage.

In order to aid municipalities in providing for the expenditure attending their inception, the original Act provided for endowment being granted for a period of fifteen years. In each of the first five years after incorporation, every municipality was entitled to a sum equal to the whole amount actually raised by rates or assessments paid during the past half-year; in each of the next succeeding five years, a sum equal to one-half; and in each of the next succeeding five years, a sum equal to one-fourth of the amount so received. After the expiry of these fifteen years the assistance which municipalities may demand from the Government ceased, and further aid from the State must be obtained by special grant. At the end of 1907 there were sixteen municipalities entitled to statutory endowment.

## VALUATIONS.

The following table shows the capital and annual values and the assessment of boroughs and municipal districts for the year ended 3rd February, 1908. The amounts shown for the city of Sydney, relate to the year ended 31st December, 1907, and the value of the improved land is inclusive of the value of the vacant lands, which are assessed on the rental value:—

Division.	Capital Value of—		Total Amount of General Rate Levied.	Fair Average Annual Value of—	
	Improved Land with Buildings thereon.	All Ratable Property.		Improved Land with Buildings thereon.	All Ratable Property.
	£	£	£	£	£
City of Sydney ... ..	45,749,800	45,749,800	182,939	2,323,040	2,323,010
Suburbs ... ..	52,344,600	57,578,400	180,698	3,725,690	3,987,380
Total, Metropolitan...	98,094,400	103,328,200	363,637	6,048,730	6,310,420
Country ... ..	38,256,300	41,668,300	135,224	2,790,970	2,961,570
Total ... ..	136,350,700	144,996,500	498,861	8,839,700	9,271,990

A nominal annual value was frequently set upon unimproved land in order to avoid full rating, and in such cases no accurate estimate can be made of the real value of the property. It may be taken, therefore, that the figures, both in the preceding and the following table, suffer on this account. On the other hand, it has been found difficult to obtain valuations which show the total extent of the decline in the values of real estate, for it is not generally considered that reduction of the capital value is in ratio to that of the annual value as indicated by the lower rating.

It will be observed that, with the exception of the annual value of ratable property in the country districts, both the annual and capital values have increased each year:—

Municipal Year. (ended February).	Sydney and Suburbs.		Country Municipalities.		Total.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£	£	£
1899 ...	4,992,860	87,232,900	2,413,950	33,698,000	7,406,810	120,930,900
1900 ...	5,005,300	87,495,300	2,416,900	33,749,800	7,422,200	121,245,100
1901 ...	5,060,500	88,348,703	2,836,130	36,429,600	7,896,630	124,778,300
1902 ...	5,165,030	89,587,103	2,920,500	37,936,300	8,085,530	127,523,400
1903 ...	5,384,020	91,988,200	2,624,890	36,606,500	8,008,910	128,594,700
1904 ...	5,617,640	96,132,300	2,681,750	38,046,700	8,299,390	134,179,000
1905 ...	5,850,840	98,803,300	2,675,200	38,355,800	8,526,040	137,159,100
1906 ...	5,969,940	100,434,200	2,741,390	39,223,700	8,711,330	139,657,900
1907 ...	6,071,480	101,833,800	2,770,620	39,417,000	8,842,100	141,250,800
1908 ...	6,310,420	103,328,200	2,961,570	41,668,300	9,271,990	144,996,500

The increase between 1899 and 1908 was considerable, the annual value having risen from £7,407,000 to £9,272,000, and the capital value from £120,931,000 to 144,996,500. Part of this increase was due to an additional number of districts incorporated, the area having increased from 1,769,000 to 1,920,000 acres; but when allowance is made for these it will still be found that the capital value increased to a large extent.

#### VALUATIONS AND RATING UNDER 1906 ACT.

Since the 1st January, 1908, under the Local Government Act of 1906, municipalities must levy a general rate on the unimproved capital value of all ratable land, and may levy additional general, special, local, or loan rates on either the unimproved or the improved capital value. Municipal rates will not be charged any longer on the annual value, the only rates on that value now being levied being those charged by the Metropolitan and Hunter River Water Supply and Sewerage Boards.

The unimproved capital value of land is the amount for which the fee-simple estate in such land could be sold under such reasonable conditions as a *bonâ-fide* seller would require, assuming that the actual improvements had not been made.

The improved capital value is the amount for which the fee-simple estate of the land, with all improvements and buildings thereon, could be sold.

The general rate must be not less than 1d. in the £ on the unimproved capital value of all ratable land, and the total amount to be derived from the general rate and additional general rate taken together must not exceed the amount yielded by a rate of 2d. in the £ on the unimproved value and 1s. 6d. in the £ on the assessed annual value of all ratable land. In 1908, very few municipalities levied additional general rates, nearly all confining themselves to one general rate. The variation in the rates is rather remarkable. In the suburbs of Sydney they ranged from 1d. to 5d. in the £, and in the country from 1d. to 26½d. The

number of municipalities levying the rates specified below was as follows, distinguishing suburban from country, and showing the unimproved capital value of the land in each class:—

General Rate Levied.	Number of Municipalities.		Unimproved Capital Value of Land.	
	Suburbs.	Country.	Suburbs.	Country.
			£	£
1d. and under 2d....	1	31	65,046	4,273,931
2d. „ 3d....	11	36	5,900,444	6,683,879
3d. „ 4d....	17	42	11,171,327	5,052,559
4d. „ 5d....	9	26	4,880,249	2,164,266
5d. „ 6d....	3	9	1,818,622	768,239
6d. and over	Nil.	5	.....	1,065,629
Total	41	149	23,835,688	20,008,503

The majority of councils in both divisions levied rates between 3d. and 4d.; the next in number were between 2d. and 3d., and the next between 4d. and 5d. The municipalities which levied 6d. and over in the £ were Bourke and Scone each 6d., Aberdeen 7d., Broken Hill 7½d., and Wrightville 26¾d. Only one council, Homebush, in the suburbs, levied 1d., and thirty-one in the country.

It was generally supposed that, under the new system of rating, the unimproved values would be increased, and the following statement shows that this opinion was largely confirmed. The table is a comparison of the unimproved and improved values in 1908 and 1907:—

Division.	Unimproved Value.			Improved Value.		
	1907.	1908.	Increase.	1907.	1908.	Increase.
	£	£	per cent.	£	£	per cent.
Sydney—City	20,207,812	20,207,812	Nil.	45,545,700	45,749,800	0·4
Suburbs...	19,583,598	23,835,688	21·7	57,578,400	56,400,759	(-) 2·1
Metropolis	39,791,410	44,043,500	10·7	103,124,100	102,150,559	(-) 0·9
Country	14,875,612	20,008,503	34·5	41,668,300	44,659,776	7·2
Total	54,667,022	64,052,003	17·2	144,792,400	146,810,335	1·4

(-) Denotes decrease.

The unimproved value in the city of Sydney in 1908 was not available, but has been left the same as in 1907, as the basis of rating remained unaltered. The increase in the value of unimproved land was more than one-third in the country and over one-fifth in the suburbs. The improved value did not increase to anything like the same extent, that in the suburbs actually decreasing by 2 per cent. In the country it increased by 7 per cent.

The difference between the unimproved and improved capital values is, of course, the value of improvements, and the following statement shows that in both the suburbs and country the value of improvements has declined largely or been written down:—

Division.	Value of Improvements.		
	1907.	1908.	Decrease.
	£	£	per cent.
Sydney—City ... ..	25,337,888	25,541,988	+ 0·8
Suburbs ... ..	37,994,802	32,565,071	14·3
Metropolis ..	63,332,690	58,107,059	8·3
Country ... ..	26,792,688	24,651,273	8·0
Total ... ..	90,125,378	82,758,332	8·2

+ Denotes increase.

Thus it is seen that the value of improvements in the suburbs has been reduced by over £5,000,000, or 14 per cent., and in the country by more than £2,000,000, or 8 per cent.

The improved capital value of ratable land in municipalities is £64,052,000, and in shires £81,527,000, the total of the two being £145,579,000. If to this be added £10,000,000, the estimated unimproved value of unincorporated land in the Western division, the unimproved value of the land of the State, excluding a small area exempt from taxation, is £155,579,000. The value placed upon land in the Western division is 2s. 6d. per acre, which is over 25 per cent. lower than in the shire in the west of the Eastern division with the lowest value per acre, and cannot be considered high.

The value of improvements in municipalities is £82,758,000, or 129 per cent. of the unimproved value. In the suburbs it is 137 per cent. and in the country 123 per cent. The value of improvements is not available for all the shires, but assuming that it is the same proportion of the unimproved value as the average in those which are known, namely, about equal to the unimproved value, a value of, say, £81,000,000 is obtained. In the Western division it may be placed at £10,000,000, so that for the whole State the following values are obtained:—

Division.	Unimproved Value of Land.			Value of Improvements.		
	Total.	Per Head.	Per Acre.	Total.	Per Head.	Per Acre.
	£	£	£ s. d.	£	£	£ s. d.
Sydney—City ... ..	20,208,000	171	6,987 11 0	25,542,000	216	8,831 19 0
Suburbs ... ..	23,836,000	52	258 1 2	32,565,000	71	352 11 3
Metropolis ...	44,044,000	76	462 7 0	58,107,000	101	609 19 10
Country Municipalities	20,008,000	46	10 19 4	24,651,000	57	13 10 2
Shires ... ..	81,527,000	150	0 14 0	81,000,000	149	0 13 11
Western Division (part unincorporated).	10,000,000	506	0 2 6	10,000,000	506	0 2 6
State ... ..	155,579,000	99	0 15 8	173,758,000	110	0 17 6

The real property of the State, worth £329,337,000, and equivalent to £209 per head, is a most valuable asset.

## REVENUE.

The total revenue collected by all the municipalities of the State (exclusive of refunds and proceeds of loans) during the year 1907-8 amounted to £1,095,850, including the State endowments and grants of £71,206. The chief heads of revenue were as stated below. In "other rates" are included the sanitary charges—where these are collected by the municipalities—although they are not levied at so much per £, but represent fees for direct services:—

Division.	General Rates.	Other Rates.	Endowments.	Grants.	Other Revenue.	Total.
	£	£	£	£	£	£
Sydney—City ... ..	193,053	59,742	.....	.....	86,824	339,619
„ Suburbs ... ..	189,736	78,222	264	22,035	30,733	320,990
Country ... ..	141,359	199,550	2,113	46,794	45,425	435,241
Total ... ..	524,148	337,514	2,377	68,829	162,982	1,095,850

The general rates amounted to £524,148—1s. in the £ being the general rate of all municipalities, except the city of Sydney, which levied 1s. 9d. A few other exceptions have been mentioned already. No special rate is levied in the city, and in order to make the comparison complete, the cost of lighting and of street-watering should be deducted from the general rates. The amount spent for the former service during 1907 was £25,536, equal to about 2½d. in the £; and on street-watering and sanding, £6,367, equal to ½d. in the £.

Other rates and charges—for lighting, water, and other services—are levied in many municipalities, the receipts under this head amounting in 1907-8 to £337,514. This sum does not include the proceeds of rates levied by the Metropolitan and Hunter District Water and Sewerage Boards, and the water supplies of Campbelltown, Liverpool, Richmond, Camden, and Wollongong, which, though actually local rates, are not collected by the municipalities affected by them. The amount received from the sources specified during 1907-8 was £549,057, making, with the sum already mentioned, £886,571 as the total charge for these special services. The whole of the city of Sydney and suburbs is supplied with water by the Metropolitan Board, while the greater part of Newcastle and Maitland and their suburbs are served by the Hunter District Board.

The endowments and grants amounted to 6·50 per cent. of the total revenue, the sum being equivalent to 1s. 4½d. per head of the total population within incorporated areas, and to 7·98 per cent., or 1s. 7½d. per head, excluding the city of Sydney. The proportion which each source of revenue bears to the whole varies considerably, as the following statement shows:—

Division.	General Rates.	Other Rates.	Endowments and Grants.	Other Revenue.	Total.
	per cent.	per cent.	per cent.	per cent.	per cent.
Sydney—City ... ..	56·85	17·59	.....	25·56	100
„ Suburbs ... ..	59·11	24·37	6·95	9·57	100
Country ... ..	32·48	45·85	11·23	10·44	100
Total ... ..	47·83	30·80	6·50	14·87	100

It will be seen subsequently that the gross revenue of all municipalities, not including the State endowment and grants, was £1,024,644; if to this be added the revenue of the Metropolitan and other Water and Sewerage Boards mentioned above, the total will reach £1,573,701. This may be taken as the whole burthen of local taxation, and is equivalent to about £1 11s. 2d. per head of the population residing within the limits of incorporated districts, and to 17·8 per cent., or 3s. 6½d. in the £, of the total annual value of all ratable property.

The revenue collected by the municipalities during the five years ended February, 1908, was as follows:—

Municipal Year (ended February).	General Rates.	Other Rates.	Endowments and Grants.	Other Revenue.	Total.
	£	£	£	£	£
1904	456,853	197,358	60,751	120,723	835,685
1905	466,587	214,754	24,225	149,842	855,408
1906	477,403	225,325	24,335	182,674	909,737
1907	486,647	285,389	83,022	148,178	1,003,236
1908	524,148	337,514	71,206	162,982	1,095,850

The revenue has increased by 31 per cent. during the five years, the principal increase having been in "other" rates. In 1905 and 1906, the amounts granted by Government were smaller than in the other three years.

#### EXPENDITURE.

The total expenditure during 1907-8 by the various municipalities, including payments to sinking funds, but excluding repayments of loans and refunds, amounted to £1,172,156, which was £76,306 more than the receipts.

The municipal expenditure may be grouped under the following heads:—

Division.	Admini- strative Expenses.	Works, Services, and Improvements.				Interest on Loans and Overdrafts.	Payments to Sinking Funds.	Other Expenditure.	Total.
		General	Light- ing.	Water.	Sanitary and other.				
Sydney—City .. ..	£ 20,643	£ 136,745	£ 140,569	£ .....	£ 69,823	£ 16,150	£ 14,400	£ 393,330	
"    Suburbs .. ..	27,487	153,048	44,381	50	32,880	34,180	1,056	327,152	
Country .. ..	51,226	132,538	69,648	43,599	81,188	30,536	3,200	446,674	
Total .. ..	99,356	422,331	255,098	43,649	114,068	134,539	20,406	1,172,156	

Valuers and auditors' fees, legal expenses, and a few other items which rightly should be included with administrative expenses, are in the table included in "other" expenditure, as they cannot be separated therefrom. The total expenditure on sanitary services does not appear in the table, as in many municipalities the fees are paid to the contractors.

The large amount of lighting expenditure in the city of Sydney is due to the cost of managing the electric lighting plant owned by the council.

The total expenditure on works and services was £835,146, and the administrative expenses £99,356. Excluding the city, the expenditure on works was £557,832, and on administration, £78,713. Interest on loans and overdrafts took £134,539, while during the year £20,406 was paid to sinking funds.

The proportion which each head of expenditure bears to the total is as shown below:—

Division.	Adminis- trative Expenses.	Works, Services, and Improvements.				Interest on Loans and Over- drafts.	Pay- ments to Sinking Funds.	Other Expen- diture.	Total.
		General.	Light- ing.	Water.	Sanitary and Other.				
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Sydney—City .. ..	5.18	34.33	35.29	..	..	17.53	4.05	3.62	100
„ Suburbs.. ..	8.40	46.78	13.72	.02	10.05	10.45	.32	10.26	100
Country .. ..	11.47	29.67	15.59	9.76	18.17	6.84	.72	7.73	100
Total.. ..	8.48	36.03	21.76	3.72	9.73	11.48	1.74	7.06	100

Of the total expenditure of municipalities, 8.48 per cent. was on administrative expenses, 71.24 per cent. on works and services, 11.48 per cent. on interest, and 1.74 per cent. to sinking fund. In the suburbs only .32 per cent. was paid to sinking fund, and in the country .72 per cent.

The relative cost of administration in the country is high, being 11.47 per cent. of the total expenditure, and 36 per cent. more than in the suburbs. This is, however, due, no doubt, to the sparse population and small revenue of many of the country municipalities. In such case the expenses on account of salaries, &c., would naturally be larger proportionately than in the more closely settled localities in the suburbs.

The high proportion of expenditure on water services in the country is owing to the cost of managing works constructed under the Country Towns Water Supply Acts. In the suburbs the water supply is controlled by the Metropolitan Board of Water Supply.

The expenditure by municipalities during the last five years is shown in the following statement:—

Municipal Year (ended February).	Adminis- trative Expenses.	Works, Services, &c.	Interest on Loans.	Payments to Sinking Funds.	Other Expenditure.	Total.
	£	£	£	£	£	£
1904 .. ..	82,649	717,996	122,959	41,944	58,496	1,024,044
1905 .. ..	85,261	677,397	126,569	17,382	60,947	967,556
1906 .. ..	88,058	645,320	132,811	13,514	67,530	947,233
1907 .. ..	90,629	679,823	133,457	12,899	73,274	990,082
1908 .. ..	99,356	835,146	134,539	20,406	82,709	1,172,156

The expenditure in 1903-4 was £1,024,044, but was less than a million sterling in each of the next three years. In those years the Government grants were curtailed, and the councils were forced to reduce expenditure on works, services, &c. At the same time the payments to sinking funds were reduced. In 1907-8, however, the Government grants were increased, and the municipal expenditure increased correspondingly to £1,172,156.

Sinking fund payments were reduced from £41,944 in 1903-4 to £12,899 in 1906-7, but increased in 1907-8 to £20,406. During the same period interest payments increased steadily from £122,959 to £134,539.

## LOANS.

The total amount of loans raised during 1907-8 was £246,488, including £145,000 borrowed by the city of Sydney, while a sum of £67,598 was redeemed; these sums include additions to and reductions of secured overdrafts. The sinking funds were increased by £20,406, so that it would appear that the amount unprovided for was increased by £158,484 in the course of the year, including the new loan of the city of Sydney. Most of the new loans in the suburban and country districts were renewals, opportunity naturally being taken of the general reduction in the rates of interest to considerably reduce, when practicable, the annual liability in respect of interest charges. The total amount of loans, apart from the liability of the State under the Country Towns Water and Sewerage Act, outstanding at the close of the year, was £3,305,765, and towards meeting this amount there was at the credit of the sinking funds a sum of £190,724, leaving £3,115,041 not provided for.

Rates of interest ranged from  $2\frac{3}{4}$  per cent.—which was carried by £11,288 to 7 per cent., which, however, was only payable on £1,879; and the amount paid as interest on loans and overdrafts during the year was £134,539. Adding to the amount of loans the unsecured bank overdrafts, £137,076, on which rates vary from 5 to 8 per cent., a total of interest-bearing indebtedness of £3,442,841 is found, at an average rate of interest of 3·91 per cent.—viz., 3·57 per cent. on the loans of the City of Sydney; 4·19 per cent. on those of the suburban municipalities; and 4·55 per cent. on those of the country municipalities. The total debt per head of population living in municipalities amounts to £3 8s.  $1\frac{1}{4}$ d., or, if allowance be made for sinking funds, £3 4s. 4d., while the yearly charge for interest is 2s. 8d. per head. These sums, compared with the resources of the municipalities, appear by no means formidable.

The following are the outstanding loans on the 3rd February, 1908, and the sinking funds set apart to meet them:—

Division.	Loans Outstanding.			Sinking Funds.
	New South Wales.	London.	Total.	
	£	£	£	£
Sydney—City ...	970,000	910,000	1,880,000	167,061
„ Suburbs ...	679,820	116,500	796,320	7,354
Country ...	578,079	51,366	629,445	16,309
Total ...	2,227,899	1,077,866	3,305,765	190,724

The loans are redeemable at various periods from 1908 to 1931, the largest amount to be met being £460,644 in 1912, and the smallest £79,265, in 1908. The total amount to be repaid in London was £1,077,866, or rather less than one-third of the total, and the total amount of debentures held locally was £2,227,899.

The majority of the loans are renewable at maturity, and sinking funds have been established in connection with several of the issues, the aggregate amount of which, at the end of 1907, was £190,724.

Against the loan indebtedness of £3,305,765 the municipalities at the end of 1907 had assets to the value of £4,396,623 to show, classified as follows:—

Assets.	Sydney.	Suburbs.	Country.	Total.
Cash Assets—	£	£	£	£
Outstanding rates, &c. ... ..	9,114	40,796	119,674	169,584
Sinking funds ... ..	167,061	7,354	16,309	190,724
Fixed deposits ... ..	.....	3,536	13,013	16,549
Other, including cash in hand ... ..	95,591	26,545	80,266	202,402
Other Assets—				
Land, buildings, &c. ... ..	1,524,007	211,718	338,757	2,074,482
Works ... ..	496,702	50,849	1,074,691	1,622,242
Working plant, stores, &c. ... ..	32,427	21,464	66,749	120,640
Total assets ... ..	2,324,902	362,262	1,709,459	4,396,623

In addition to the above, there were what may be called inconvertible assets, roads, streets, bridges, &c., which were valued at £6,266,000. Although these are excluded, they are, of course, most necessary in connection with the development of the various localities, and add materially to their resources for rating purposes.

The large amount of outstanding rates shown above is due in great part to the accumulations on unimproved properties, the owners of which could not be traced. Under the 1906 Act, however, the Councils are given greatly increased powers for the recovery of rates.

As against the value of works shown in the table, there is an obligation by 40 municipalities to repay annually to the Government a sum of £25,310 on account of interest and principal on the cost of waterworks constructed under the Country Towns Water Supply Act. There is a further obligation by eight municipalities of £1,937 per annum on account of sewerage works constructed under the same Act.

#### SHIRES.

According to the *interim* report of the Local Government Commissioners, issued in July, 1905, it was proposed to divide the State into 132 shires, the unimproved value of which was £67,131,466. The Commissioners invited objections from public bodies, and all persons interested, with regard to the boundaries of the shires, and 113 protests were received, of which forty-two were rejected, while those remaining were either approved or held over until the further consideration of the Local Government Extension Bill. The final report of the Commissioners, which was issued in January, 1906, recommended the establishment of 134 shires, and thirty-two additions to existing municipalities.

Since the 1st January, 1907, there have been, therefore, 134 shires working under the Local Government Act of 1906. These shires are all in the Eastern and Central divisions, 96 being in the former, and 38 in the latter. With the exception of 8 municipalities, the Western division is unincorporated.

The shires vary in area from 36 square miles in the case of Ku-ring-gai, immediately north of the metropolis, to 5,745 square miles in the case of Lachlan, whose head-quarters are Condobolin. The smallest shires are in the most closely settled parts of the State. A general rate of not less than 1d. in the £, and not more than 2d. in the £ may be levied by shires on the unimproved capital value of all ratable land. If, however, the general rate of 1d. is more than sufficient to meet requirements, the Governor may allow the rate to be reduced below 1d. In 1907, five shires levied a rate of less than 1d.

The rates levied in 1907 and the unimproved capital value of the land in each class are as follows:—

No. of Shires.	General Rate levied in £. d.	Unimproved Capital Value of Land. £
1	$\frac{1}{3}$	803,563
1	$\frac{2}{3}$	885,803
3	$\frac{3}{4}$	3,517,689
104	1	65,229,572
10	$1\frac{1}{4}$	4,341,332
12	$1\frac{1}{2}$	5,508,594
3	2	1,240,261
134	$1\frac{1}{8}$ (average).	81,526,814

One shire, Patrick Plains, also levied a special rate of  $\frac{1}{4}$ d. in the £ in connection with the construction of cattle sale-yards.

The unimproved capital value of the shires in 1907 was £81,526,814. It is not possible to give the improved capital value or the assessed annual value, as 41 of the shires did not make these valuations. The total amount of general rates levied was £357,805.

In several cases the general rate was not sufficient to meet the requirements, and the State paid endowment to a large number. Endowments are fixed every third year, and are determined according to the extent of the Shire, the probable revenue from a rate of 1d. in the £, the necessary expenditure, the extent of roads and other public works to be constructed and maintained, and other matters. The endowment in any year is paid on the general rates actually collected in the preceding year. There are six classes into which the Shires are divided for endowment purposes, the classification for the three years 1907-09 being as follows:—

47	shires	in 1st class	receive no endowment.
27	"	1st	" " up to 10s. in the £ on General Rate.
12	"	2nd	" " " 15s. " "
8	"	3rd	" " " 20s. " "
9	"	4th	" " " 25s. " "
8	"	5th	" " " 30s. " "
23	"	6th	" " not less than 40s. in the £ on General Rate.

In 4 cases the endowment was 100s. or over in the £, the highest being 133s. to Bellingen Shire. In 1907, the Government paid £178,310 as endowment to the Shires. A further sum of £57,484, as grants for special purposes, was also paid, making the total subvention from the State £235,794. As, however, the State relinquished the tax on land in the Shires, the unimproved value of which was £81,527,000, it is probable that it contributed altogether to the Shires over £500,000.

The principal heads of revenue in 1907 were as follows:—

Particulars.	£	per cent.
General rates ... ..	287,635	53·7
Government assistance ... ..	235,794	44·0
Public works ... ..	3,064	0·6
Health administration ... ..	2,376	0·4
Public services ... ..	4,593	0·9
Miscellaneous ... ..	2,197	0·4
Total revenue ... ..	£535,659	100·0

As shown subsequently, the expenditure during the year was £385,605, so that there was a surplus at the end of the year of £150,054. If to this be added £60,957 outstanding rates it will be apparent that the shires as a whole were in a satisfactory financial position. It is probable, however, that in 1907 they were not in full working order, and that necessary works were postponed. The same reason no doubt accounts to some extent for the large

amount of outstanding rates, although with large Government endowments some of the shires were under no necessity to collect rates promptly. In two cases actually no rates at all were collected, in one case under £10, and in four cases under £100. On the other hand five shires collected all their rates, and seven had under £10 outstanding.

Of the total revenue 54 per cent. was received from general rates, and 44 per cent. from Government assistance, leaving only 2 per cent. collected from works and services. The items in public works were contributions to roads, bridges, &c., £1,437, and fees from punts and ferries, £1,627. The principal item in public services was, rent, &c., from public watering places, £4,261.

The principal heads of expenditure in 1907 were as follows:—

Particulars.	£	per cent.
Administrative expenses ... ..	100,435	26·0
Public works... ..	249,868	64·8
Health administration ... ..	1,536	0·4
Public services ... ..	3,870	1·0
Shire property ... ..	18,853	4·9
Miscellaneous ... ..	11,043	2·9
Total expenditure ..	£385,605	100·0

The administrative expenses were £100,435, or 26 per cent. of the total expenditure. This may be considered high, especially in connection with the expenditure on works and services, and suggests the possibility of there being too many shires. Of the administrative expenses, £51,902 were on salaries, £12,591 on advertising, stationery, printing, &c., £11,649 on valuation fees, and £16,908 on president's allowance and councillors' travelling expenses. The expenditure on works accounted for 65 per cent. of the total, and was about £14,000 in excess of the grants received from Government. The principal expenditure was £239,821 on roads and streets, viz.:—£169,288 on maintenance, repairs and renewals, and £70,533 on construction. On other public works—bridges, culverts, punts, ferries, wharves, &c.—£7,163 were spent on maintenance and repairs, and £2,884 on construction.

#### BOARDS AND TRUSTS.

In addition to the ordinary form of municipal local government, there are various boards and trusts with local jurisdiction. The control of water supply and sewerage of the Metropolitan and Hunter districts is relegated to separate boards. The Metropolitan and the Country Towns Water Supply and Sewerage Acts, the Fire Brigades Act, the Sydney Harbour Trust Act, and the Metropolitan Traffic Act, were all passed with the object of extending the principle of local government, and boards have been established to carry out the provisions of some of these Acts.

The majority of the Boards dealing with local affairs have jurisdiction within the metropolitan area, and work mostly in connection with the local municipalities, although possessing powers independent of these bodies. In 1900 the Metropolitan Traffic Act was passed, which repealed the Public Vehicles Act, 1899, and such portions of the Sydney Corporation Act of 1879 and the Municipalities Act, 1897, as were inconsistent with the Act, and placed the complete control of street traffic and the licensing of public vehicles, drivers, and conductors, under the Inspector-General of Police.

Under the authority of the Fire Brigades Act of 1902, which repealed the 1884 Act, a Metropolitan Fire Brigade Board and forty-two country boards have been established. The cost of maintaining the Metropolitan Brigade is contributed in equal amounts by the Government, the municipalities within the proclaimed area, and the fire insurance companies holding risks within these municipal districts. In 1907 the contributions

consisted of £17,400 from the insurance offices interested, and a similar amount from the Government and the city and suburban municipalities. The amount of risk on the 31st December, 1907, was £86,563,304. The country boards receive subsidies from the Government, the municipalities interested, and the insurance companies, under the same conditions as are in existence with regard to the Metropolitan Board. In addition to the boards constituted under the Act, several municipalities contribute to local fire brigades.

The Metropolitan Board of Water Supply and Sewerage was established in 1887, and that of the Hunter District in 1892; reference to their transactions will be found in subsequent pages.

The Sydney Harbour Trust was established in the year 1900, and a description of its functions will be found in the chapter dealing with "Shipping."

Leaving out of consideration the expenditure on works of national importance the Government has, during the past forty-eight years, expended no less than £41,904,000 on works of a purely local character, not including school buildings. The division of the State into local government districts will not necessarily be followed by an entire stoppage of the direct expenditure on works of local interest by the central Government, but the larger portion of the works now undertaken by Government will be left to the local authorities, who, having to provide for the expenditure, will probably see that it is laid out to the best advantage. The expenditure on account of public works during the last ten years is given below; but the figures cannot be distributed under the headings of metropolitan and country for 1907 and 1908:—

Year ended 30th June.	Country Districts.		Metropolitan District.		Total.	
	Expenditure.	Per Inhabitant.	Expenditure.	Per Inhabitant.	Expenditure.	Per Inhabitant.
	£	£ s. d.	£	£ s. d.	£	£ s. d.
1899	700,500	0 16 6	532,900	1 2 7	1,233,400	0 18 8
1900	802,300	0 18 7	397,600	0 16 6	1,199,900	0 17 10
1901	1,061,600	1 4 6	604,400	1 4 9	1,666,000	1 4 7
1902	1,135,800	1 5 6	535,600	1 1 4	1,671,400	1 4 0
1903	839,700	1 0 0	509,400	0 18 8	1,349,100	0 19 2
1904	579,400	0 12 7	189,000	0 7 5	768,400	0 10 9
1905	456,800	0 9 8	184,500	0 7 1	641,300	0 8 9
1906	487,800	0 10 1	167,000	0 6 4	655,400	0 8 9
1907	.....	.....	.....	.....	887,000	0 11 7
1908	.....	.....	.....	.....	837,000	0 10 6

The amounts given above include the expenditure both from loans and from revenue. The large decline from 1903 to 1906 is due chiefly to the smaller borrowing policy of the Government, while the increase since the last-mentioned year is accounted for by the operation of the Water and Drainage Act in 1907, and a considerable expansion of tramway construction in 1908.

#### WATER SUPPLY FOR COUNTRY TOWNS.

The Country Towns Water Supply and Sewerage Act of 1880 was passed with the object of assisting municipalities to construct general systems of water supply and sewerage. To the end of June, 1908, 40 municipal councils had availed themselves of the privileges offered as regards the former service, while works were under construction in six other

municipalities. With respect to sewerage, however, only 8 councils had profited by the provisions of the Act, while the works at Parramatta are still incomplete.

The amount required for carrying out the works is advanced by the State. The municipality, however, has the option of supervising and constructing the works, failing which the Government undertakes these duties. Under the original Act, the sum advanced was to be repaid by instalments, with interest at the rate of 4 per cent. on the unpaid balances, each annual instalment to be equal to 6 per cent. of the total cost, and the first payment to be made twelve months after the date of the transfer of the works to the municipality; but as it was found that the municipalities which had contracted liabilities in respect of water supply works were unable to comply with these conditions, the Government, in 1894, passed an amending Act which granted them more favourable terms, the rate of interest being reduced to 3½ per cent., and the yearly repayments fixed at a maximum of 100. Under the amending Act of 1905, however, the rate of interest is fixed at 4 per cent. per annum. This Act also provides for the issue of licenses to workmen, for the recovery of rates, and for making by-laws for the assessment of lands, and other purposes.

The following is a statement of the waterworks completed and handed over by the Government at the 30th June, 1908, with the amounts expended, and the sums payable annually for the period of one hundred years, the first repayments having become due within twelve months of various dates ranging from the 31st December, 1893, to the 31st December, 1907. In the calculation of these repayments, the interest on the expenditure has been added, and any payments by the Councils, as well as sums remitted under the authority of the Act, have been deducted.

Municipality.	Amount of Original Debt.	Amount Payable Annually.	Municipality.	Amount of Original Debt.	Amount Payable Annually.
	£	£		£	£
Albury .. ..	41,000	1,482	June .. ..	42,000	1,519
Armidale .. ..	40,418	1,461	Kiama .. ..	7,073	256
Ballina .. ..	13,606	492	Lismore .. ..	14,822	558
Barranald .. ..	6,000	217	Lithgow .. ..	33,510	1,346
Bathurst .. ..	55,734	2,019	Moama .. ..	7,600	275
Berry .. ..	4,380	159	Moree .. ..	10,940	396
Blayney .. ..	10,771	389	Moss Vale .. ..	13,000	470
Bourke .. ..	13,436	486	Mudgee .. ..	17,030	616
Casino .. ..	16,286	372	Nowra .. ..	13,250	483
Cobar .. ..	26,160	946	Nyngan .. ..	10,219	369
Condonbottin .. ..	7,725	283	Orange .. ..	32,088	1,182
Coonamble .. ..	9,349	350	Parkes .. ..	22,000	796
Cootamundra .. ..	20,969	758	Pictou .. ..	15,987	578
Corowa .. ..	9,318	398	Tumut .. ..	10,238	370
Deniliquin .. ..	18,468	668	Wagga Wagga .. ..	41,588	1,518
Dubbo .. ..	15,298	551	Warren .. ..	3,969	143
Forbes .. ..	20,927	817	Wellington .. ..	12,423	451
Goulburn .. ..	55,000	1,989	Wentworth .. ..	4,000	145
Hay .. ..	17,075	624	Wilcannia .. ..	8,881	303
Hillgrove .. ..	4,009	170			
Jerrilderie .. ..	6,308	232	Total .. ..	£ 726,898	26,637

In the case of Coonamble, a sum of £53 11s. is payable annually for water supplied by a Government artesian bore.

At Forbes, Hay, and Wilcannia, the works were constructed by the municipal authorities, and the expenditure shown in the table is not the actual cost of the works, but the Government valuation.

Fifteen Municipal Councils have constructed works out of their own resources, and of these seven have also new works constructed by the Government. On the 3rd February, 1908, the value of the waterworks constructed by municipalities was £73,712.

## SEWERAGE WORKS.

As previously mentioned, only eight Municipal Councils have made any move towards taking advantage of the Act providing for the carrying out of sewerage works in country towns, and the capital debt and annual repayments relating to them on the 30th June, were as follows:—

Municipality.	Amount of original Debt.	Amount payable Annually.	Municipality.	Amount of original Debt.	Amount payable Annually.
	£	£		£	£
Ballina ... ..	327	20	Lismore ... ..	17,589	636
Blayney ... ..	429	26	Narrandera ... ..	5,197	188
Casino ... ..	3,023	129	Tamworth ... ..	1,217	56
Forbes ... ..	1,623	59			
Hay ... ..	22,040	797	Total... ..	51,445	1,911

Other sewerage systems are in existence in several places; but these have been constructed altogether apart from the Act, and, with few exceptions, the operations have been on a minor scale. The general system of sewerage which is now being carried on in the metropolitan area will supersede the isolated systems of some of the suburban districts, and some of the sewers already constructed will eventually form part of the general scheme. The Metropolitan Board has already taken over part of the sewerage constructed by the city of Sydney and the municipalities of Ashfield, Balmain, Darlington, Glebe, North Sydney, and Redfern. The cost of the sewerage works not taken over was £54,169.

## GAS AND ELECTRIC-LIGHTING WORKS.

The Municipalities Act authorises the construction of works for public lighting, and gives the power to provide private consumers with gas; but as regards electric-lighting this cannot be done without the authority of a special Act. On the 3rd February, 1908, 25 municipalities had constructed gas works valued at £196,864.

In addition, acetylene gas plants have been established at Carcoar, Central Illawarra, and East Orange, at a total cost of £480.

The following municipalities have erected electric-lighting plants: Sydney, Redfern, Broken Hill, Newcastle, Penrith, Tamworth, and Young; the value of the plant in February, 1908, being £499,402, of which £421,702 was the value of the plant of the city of Sydney.

The city of Sydney obtained powers to erect an electric-lighting plant, and loans amounting to £350,000 have been raised for this purpose. The lights were used for the first time on 8th July, 1904, when parts of the city were illuminated. Since that date great progress has been made, and the public parks, as well as the remainder of the streets under the control of the Council are now installed. The Municipality of Moss Vale is supplied with electric light, both for street and house lighting.

## METROPOLITAN BOARD OF WATER SUPPLY AND SEWERAGE.

In March, 1888, the Government passed an Act establishing a Board of Administration, under the title of the Metropolitan Board of Water Supply and Sewerage, to regulate the water supply and sewerage service in the county of Cumberland, including those under the control of the City Council. The management of the former service was transferred to the Board in May, 1888, and of the latter in September, 1889. The total length of water mains taken over was 355 miles, while on the 30th June, 1908, this had increased to 1,432½ miles, inclusive of trunk mains. There were 70½ miles of sewers in 1889, lengthened to 724½ miles in 1908.

The Board consists of seven members, three of whom are appointed by the Government, two by the City Council, and two by the suburban and country municipalities within the county of Cumberland which are supplied with water. The Board is subject to the general control of the Minister for Works—a provision considered necessary, as the Government advances the whole of the money for the construction of the works, the amount so advanced constituting part of the public debt of the State.

#### METROPOLITAN WATER SUPPLY.

As early as 1850 authority was given by the Legislative Council to the City Corporation for the construction of water and sewerage works, and a system of water supply from the Lachlan, Bunnerong, and Botany Swamps was adopted. By this scheme the waters of the streams draining these swamps were intercepted at a point near the shore of Botany Bay. A pumping plant was erected here, and the water raised to Crown-street Reservoir, 141 feet above the level of the sea; thence the water was pumped into Paddington Reservoir, at an elevation of 214 feet above sea-level; and to Woollahra, 282 feet above sea-level. The cost of these works was £1,719,565. This system has since been superseded by what is known as the "Upper Nepean Scheme," the management of which was transferred in 1888 to the Metropolitan Board of Water Supply and Sewerage.

The sources of supply are the waters of the Nepean, Cataract, and Cordeaux Rivers, draining an area of 354 square miles, a catchment enjoying a copious and regular rainfall. The off-take works are built at a height of 437 feet above the level of the sea, and the water flows through a series of conduits—partly tunnel, partly open canal, and in places wrought-iron aqueducts—to Prospect Reservoir, a distance of 40 miles from the farthest source of supply. The conduits above Prospect Reservoir have a capacity of 150,000,000 gallons per day, and for 10 miles below this reservoir the capacity of the canals and pipes equals a maximum of 50,000,000 gallons, while for the last 11 miles the pipes have a capacity of 17,500,000 gallons daily. In this work there are 63½ miles of tunnels, canals, and pipes.

Notwithstanding the size of Prospect Reservoir, it was found in 1902—a very dry year—that the supply was not sufficient for the growing needs of the metropolis. The Government therefore decided to build the Cataract Dam, which was completed in 1907, the catchment area above the dam being about 50 square miles. The water flows from this dam down the Cataract River to a weir at Broughton's Pass, where it enters a tunnel previously existing, and is conveyed by a system of open canals to the Prospect Reservoir. The total distance from Cataract to Sydney via Prospect is 66½ miles.

The dimensions of the Prospect and Cataract dams are shown in the following statement:—

Dam.			Height above Sea level.	Area.	Capacity.	Length.	Width at top.	Height.
			ft.	acres.	gallons.	ft.	ft.	ft.
Prospect	...	...	195	1,266½	11,029,180,000*	7,300	30	85½
Cataract	...	...	950	2,400	21,411,000,000	811	16½	160

\* Of this total, 5,526,780,000 gallons are available by gravitation.

From Prospect the water flows 5 miles by open canal to the Pipe Head Basin, thence 5 miles by 6-foot wrought-iron pipes to the Potts' Hill Balance Reservoir, which has a capacity of 100,000,000 gallons, and covers

24½ acres. This reservoir was designed to tide over any interruption in the supply from Prospect, as well as to prevent fluctuation at the head of pressure.

At Potts' Hill the water passes through a series of copper-gauze screens, and is then conducted by two 48-inch mains into Sydney. At Lewisham a bifurcation takes place in one of these mains; one branch supplying the Petersham Reservoir, the other continuing to Crown-street. The Petersham Reservoir is 166 feet above high-water mark, is built of brick, and has a capacity of 2,157,000 gallons. The new 48-inch main, laid in 1893, from Potts' Hill direct to Crown-street, is worked alternately with the old. These two trunk mains are connected at Petersham as an intermediate spot. The Crown-street Reservoir is 21 miles from Prospect. It is of brick, and contains 3¼ million gallons, the top water-level being 141 feet above high-water mark.

Owing to the topographical configuration of the reticulated area, pumping is necessary for the purpose of supplying the upper zones, and no less than 3,925¼ million gallons were raised to Centennial Park, Woollahra, and Waverley during the twelve months ended June, 1908. At Crown-street is situated the main pumping station, where are erected three sets of compound high-duty pumping engines. A covered reservoir, of a capacity of 17,000,000 gallons has been constructed in the Centennial Park, at a height of 245 feet, for the purpose of ensuring a larger bulk of water within the city limits. This, it is believed, is the largest service tank in the Southern Hemisphere. At Ashfield there is a 100,000 gallon wrought-iron tank at an elevation of 223 feet above high water. This tank is fed from the Centennial Park Reservoir by a main, and supplies the higher part of the district. Vacluse Reservoir is fed from Waverley, and supplies a district of about 1,200 acres around Vacluse and South Head. It has a diameter of 107 feet and a depth of 18 feet, and its capacity is 1,000,000 gallons.

North Sydney receives its supply from Potts' Hill, *via* Ryde, where there is a reservoir containing 2,116,000 gallons, from which the water is pumped into a million-gallon tank at Ryde village, 234 feet above sea-level, and, by a continuation of the same main, into a pair of tanks, of a joint capacity of 3,000,000 gallons, at Chatswood, at an elevation of 370 feet above high-water mark. A small pumping plant has been erected at Chatswood, and fills two tanks of 1,000,000 and 40,000 gallons capacity at Wahroonga, 7½ miles distant, at an elevation of 717 feet above sea-level; and from Wahroonga the water flows as far as Hornsby, 13 miles to the north-west of Port Jackson. A concrete reservoir of a capacity of 500,000 gallons has been constructed at Pymble. From this reservoir the districts between Pymble and Chatswood are served, thus reducing the abnormal pressure by reason of the supply being from so great a height as Wahroonga.

From the Ryde village tank the whole of Ryde, Gladesville, and Hunter's Hill are supplied; while a 9-inch main extends over the Parramatta and Iron Cove bridges to supply Balmain. An elevated tank, with a capacity of 72,800 gallons, and a reservoir with a capacity of 1,925,000 gallons have been erected for the convenience of residents at Mosman.

The districts of Campbelltown and Liverpool are supplied from the main canal by gravitation. At the latter place, a 4,000,000-gallon earthen reservoir has been constructed, and a tank with a capacity of 250,000 gallons, for the purpose of tiding over any interruption in the flow from the canal. Other districts lying nearer Sydney, *viz.*, Smithfield, Granville, Auburn, and Rookwood, are also supplied *en route*; and at Smithfield there is a 100,000 gallon concrete tank, the top water

of which is 175 feet above sea-level. At Penshurst there are two tanks 270 feet above sea-level, one of which has a capacity of 1,000,000 gallons, and the other of 20,000 gallons. Works for the supply of water to the towns of Camden and Narellan, from a point on the canal near Kenny Hill, were completed in October, 1899, and the scheme has proved satisfactory. In July, 1893, the Board assumed control of the Richmond waterworks, and in April, 1903, of the Wollongong works.

The following statement shows the number of houses and population in the metropolitan area supplied with water during the last ten years:—

Year ended 30th June.	Houses Supplied.	Estimated Population supplied.	Average Daily Supply.	Total Supply for Year,	Average Daily Supply.	
					Per House.	Per Head.
	No.	No.	gallons.	gallons.	gallons.	gallons.
1899	92,370	450,500	18,795,000	6,860,146,000	203	41·7
1900	95,192	478,000	19,886,000	7,258,373,000	208	41·6
1901	98,298	491,000	21,583,000	7,877,677,000	219	43·9
1902	101,966	509,000	21,906,000	7,995,822,000	205	43·0
1903	104,681	523,000	16,896,000	6,166,992,000	162	32·3
1904	109,191	546,000	18,690,000	6,840,549,000	171	34·2
1905	112,343	561,700	21,712,800	7,925,184,000	195	38·7
1906	116,202	581,000	22,393,300	8,173,555,000	192	38·5
1907	120,782	603,900	22,912,600	8,263,104,000	189	37·9
1908	124,083	620,400	24,500,400	8,967,135,000	197	39·5

The average daily consumption during 1908 was 24,500,400 gallons, equivalent to 197 gallons per house, or 39·5 gallons per head of population. The consumption was restricted in 1903 and 1904, and has not yet reached the average of the years preceding the two mentioned.

The rate levied for water is 6d. in the £ in the Metropolitan district, while 1s. is the charge for 1,000 gallons by meter. The revenue from the Water Service Branch during the year ended 30th June, 1908, exclusive of the country towns, was £283,410, and the expenditure £258,049. The net revenue showed a return of 4·05 per cent. on the actual capital debt of £5,150,499. The Board, however, do not debit their account with interest on the City Council Water Fund, on the ground that this expenditure was made from rates contributed by the citizens, and they, therefore, show a return of 4·16 per cent. for the year 1907-8.

The following statement gives the transactions for each of the last ten years:—

Year ended 30th June.	Capital cost— interest- bearing.	Revenue.	Working expendi- ture.	Interest.	Net return after paying working expenses.	Net profit after paying working expenses and interest.
	£	£	£	£	per cent.	£
1899	3,661,530	194,332	46,016	130,607	4·05	17,709
1900	3,797,820	195,616	45,905	132,190	3·94	17,521
1901	3,873,913	203,348	48,137	131,893	4·01	23,318
1902	3,998,531	223,201	56,226	135,306	4·18	31,669
1903	4,077,365	220,745	70,008	134,740	3·70	15,997
1904	4,289,012	222,827	57,800	144,927	3·85	20,100
1905	4,434,991	251,503	66,015	153,304	4·18	32,184
1906	4,674,341	270,263	64,487	164,216	4·40	41,560
1907	4,902,463	275,591	67,593	176,170	4·24	31,828
1908	5,009,012	283,410	75,016	183,033	4·16	25,361

The rates have been reduced from 8d. to 6d. in the £ during the last three years, but the returns still show a profit after paying working expenses and interest.

## THE HUNTER DISTRICT WATER SUPPLY.

The water supply works of the Lower Hunter were constructed by the Government under the provisions of the Country Towns Water Supply and Sewerage Act of 1880. In 1892, under the authority of a special Act, a Board was established on similar lines to those of the Metropolitan Water and Sewerage Board, the number of members also being the same—three being nominated by the Governor, one elected by the Municipal Council of Newcastle, two by the adjacent municipalities, and one by the municipalities of East and West Maitland and Morpeth. The following municipalities and unincorporated areas are within the area of the Board's jurisdiction:—Newcastle Division: Adamstown, Argenton, Ash Island, Boolaroo, Carrington, Hamilton, Hexham, Holmesville, Lambton, Lambton (New), Merewether, Minmi, Newcastle, Plattsburg, Wallsend, West Wallsend, Waratah, and Wickham; and in the Maitland Division: Abermain, Bolwarra, East Greta, Hebburn, Heddon Greta, Homeville, Kurri Kurri, Lorn, East Maitland, West Maitland, Morpeth, Oakhampton, Pelaw Main, Rutherford, Stanford Merthyr, Telarah, and Weston.

The supply of water for the district is pumped from the Hunter River, about a mile and a half up stream from the Belmore Bridge, West Maitland. The pumping engines are situated above flood level, on a hill about 44 chains from the river. At the pumping station there is a settling tank of 1,390,500 gallons; also four filter-beds, 100 feet by 100 feet each, a clear water tank of 589,500 gallons capacity, and a storage reservoir of 172,408,100 gallons available capacity. The filtered water is pumped from the clear water tank into two summit reservoirs, one at East Maitland and one at Buttai. The former is connected by a 10-inch cast-iron main about  $4\frac{1}{2}$  miles in length, with a capacity of 463,430 gallons, and supplies East Maitland, West Maitland, Morpeth, and neighbouring places. Buttai Reservoir is fed by two rising mains, one riveted steel pipe,  $20\frac{1}{2}$  inches diameter, and a 15-inch cast-iron main,  $5\frac{1}{2}$  miles in length, and has a capacity of 1,051,010 gallons, and supplies Newcastle and environs. On the hill at Newcastle there is also a high-level iron tank with a capacity of 20,000 gallons, which is supplied by a small pumping engine placed on the roof of the Newcastle Reservoir.

The length of the mains when the Board was established was  $105\frac{1}{2}$  miles, which had been increased to  $281\frac{3}{4}$  by the 20th June, 1908.

The operations of the Board are at present entirely confined to water supply, but the sewerage scheme is now being carried out by the Public Works Department, and will be completed without delay. Particulars relating to the operations of the Board are given below. The maximum rate of 1s. in the £ is levied throughout the district.

Year ended 30th June.	Capital Cost.		Revenue.	Expendi- ture (includ'g Interest).	Houses Supplied.	Estimated Population served.	Supply.	
	Amount.	Return per cent.					Daily (average).	Total.
	£		£	£	No.	No.	gallons.	gallons.
1899	477,890	2·58	26,478	30,880	7,920	39,600	869,000	317,184,000
1900	480,689	2·59	26,356	30,723	8,423	42,100	909,000	331,651,000
1901	485,835	2·77	27,405	30,948	9,086	45,400	1,005,000	366,889,000
1902	494,644	2·98	29,558	32,109	9,875	49,400	1,119,000	408,508,000
1903	500,784	3·27	31,102	32,217	10,522	52,600	1,113,000	406,172,000
1904	515,565	3·30	31,360	32,361	11,100	55,500	1,093,000	399,954,000
1905	533,270	3·64	34,486	33,714	12,167	60,800	1,266,000	461,936,000
1906	544,798	4·60	40,801	34,801	12,968	64,840	1,478,500	539,655,000
1807	627,402	3·96	41,822	38,886	13,569	67,845	1,479,400	539,964,500
1908	634,331	3·94	45,411	42,607	14,457	72,285	1,654,100	603,755,000

The funds necessary for the maintenance and management of the Water Supply and Sewerage services, as well as the sum required to pay interest on the capital debt, are obtained by the previously-mentioned rates levied on the properties situated in the districts benefited by the systems. The assessments of the Municipal Councils are generally accepted by the Boards as the values on which to strike their special rates. In cases of more than ordinary consumption of water, a charge is made according to the quantity used; while fixed charges are imposed for the use of water in certain trades and callings, for gardens, and for the use of animals.

In addition to the city and suburbs, various country towns are supplied with water by the Metropolitan Board, and their accounts are kept distinct from those of the metropolis. The works at Richmond and Wollongong were constructed under the Country Towns Water Supply and Sewerage Act, and subsequently handed over to the Board, while the districts of Campbelltown, Camden and Narellan, and Liverpool, receive the water by gravitation from the upper canal at Prospect. The following table shows particulars of the capital expenditure, receipts and expenditure, and population supplied in the country districts during the year ended 30th June, 1908:—

District.	Capital Cost.	Revenue.	Annual Liability.				Population supplied.
			Instalment required to pay off cost of reticulation and interest in 100 years.	Maintenance, including proportion of Head Office expenses.	Charges for water supplied from Canal.	Total.	
	£	£	£	£	£	£	No.
Campbelltown ...	8,261	691	299	128	157	584	1,075
Liverpool ...	20,174	953	729	167	361	1,257	2,466
Camden & Narellan	10,604	562	383	232	219	834	1,800
Richmond ...	13,767	1,083	498	625	...	1,123	1,580
Wollongong ...	35,091	1,772	1,269	583	...	1,852	2,870

#### METROPOLITAN SEWERAGE WORKS.

The original sewerage works at Sydney were begun in 1853, and in 1889, the date of transfer to the Board, there were 70½ miles of old city sewers in existence. The original scheme was designed on what was known as the "combined" system, and comprised four main outfalls discharging into the harbour at Blackwattle Bay, Darling Harbour, Fort Macquarie, and Woolloomooloo Bay. The pollution of the harbour consequent on these outlets, led to the appointment of a Commission of Inquiry, and the outcome of the labours of the Commission was the adoption of the present system.

The new scheme provides for two main outfalls, the northern and southern respectively. The former discharges into the Pacific Ocean at "Ben Buckler," near Bondi, while the southern outfall discharges into the sewage farm at Webb's grant, near Botany Bay. The northern system receives sewage from Waverley, Bondi, Woollahra, Double Bay, Darling Point, Rushcutter's Bay, Elizabeth Bay, and parts of Woolloomooloo. Storm-water channels are also constructed at various points to carry off the superfluous water after heavy rainfalls. The southern main outfall commences at a point on the north side of Cook's River, near Botany Bay, and receives the drainage from Alexandria, Waterloo, Erskineville, Newtown, and portions of the Surry Hills district. The inlet-house, into which the sewage passes, is fitted with the latest machinery for straining the sludge, and for ejecting the fluid after filtration. A portion of the area has been cultivated, and fair crops have been raised.

In connection with the sewerage of the western suburbs, a subsidiary outfall, called the western outfall, has recently been constructed. This starts at a receiving chamber in the Rockdale end of the sewage farm, from which it runs to another chamber about a quarter of a mile to the north-east of Muddy Creek, and thence to a penstock chamber at Marrickville on aqueducts over Wolli Creek and Cook's River. The latter chamber receives the discharges from the eastern, northern, and western branch sewers, and drains parts of Marrickville, Petersham, Stanmore, Newtown, Leichhardt, Annandale, Camperdown, Summer Hill, Ashfield, Canterbury, Enfield, Burwood, Five Dock, and Concord. Another branch outfall has been constructed at Coogee, which discharges into the ocean, and serves the districts of Randwick, Kensington, and Coogee. On the northern side of the city, extensive works have been completed, and in the borough of North Sydney septic tanks were built in 1899 to deal with the sewage matter, while at Middle Harbour, Mosman, and Manly, ample provision has been made for the sanitation of the districts.

The subjoined statement gives the transactions during the last ten years:—

Year ended 30th June.	Capital cost - interest-bearing.	Revenue.	Working expenditure.	Interest.	Net return after paying working expenses.	Net profit after paying working expenses and interest.
	£	£	£	£	per cent.	£
1899	2,581,514	103,955	31,295	93,307	2·81	- 20,647
1900	2,900,140	116,816	36,540	102,160	2·76	- 21,884
1901	3,110,633	125,290	44,257	107,048	2·60	- 26,015
1902	3,269,444	135,441	44,746	111,029	2·77	- 20,334
1903	3,409,176	145,666	45,609	113,116	2·93	- 13,059
1904	3,824,530	156,274	43,320	129,653	2·95	- 16,699
1905	3,774,264	213,937	54,314	130,519	4·23	+ 29,104
1906	3,828,495	220,629	55,368	134,527	4·52	+ 30,734
1907	3,922,514	217,864	62,141	140,980	3·96	+ 14,743
1908	4,053,591	216,258	64,020	148,142	3·75	+ 4,096

The actual returns per cent. do not agree with those shown above, the differences being explainable in the same manner as has been done already in the particulars relating to water supply. There was a loss during the first six years of the table, but the last four have each shown a profit. The falling off in 1907-8 was due to the reduction in the rate.

The sewerage rate for the city of Sydney and the eastern suburbs up to 1903 was 7d., the northern and the western suburbs being rated at 1s., but in 1904 a uniform rate of 11d. was imposed. In 1907 it was reduced to 10d., and in 1908 to 9½d.

The length of sewers in the metropolis, and the population and houses served during the last ten years are shown below:—

Year ended 30th June.	Houses connected.	Estimated Population served.	Length of Sewers.	Length of Storm-water Drains.	Length of Ventilating Shafts.	Length of Sewers Ventilated.
	No.	No.	miles.	miles.	feet.	miles.
1899	58,720	281,900	389·01	22·31	146,611	330·00
1900	68,060	340,300	461·41	25·67	189,243	430·00
1901	75,416	370,000	515·62	25·91	194,667	450·00
1902	82,644	413,000	550·40	27·37	236,855	552·00
1903	78,620	400,000	588·38	37·27	239,767	595·00
1904	82,215	410,000	610·73	38·67	252,977	614·00
1905	85,958	430,000	630·42	44·71	256,535	621·70
1906	88,881	444,000	656·84	44·82	264,255	636·00
1907	91,940	456,670	684·38	46·15	281,885	654·00
1908	94,735	470,000	724·37	46·94	286,000	684·00

The number of houses connected in 1902 includes reconstructions, which were classed as new connections in that and previous years, but this practice has since been abolished, and new connections only included.

#### PARKS AND RECREATION RESERVES.

It has always been the policy of the State to provide the residents of incorporated towns with parks and reserves for public recreation, and the city of Sydney contains within its boundaries an extent of parks, squares, and public gardens larger than in most of the great cities of the world without regard even to area. The total area covered is 637 acres, or 22 per cent. of the whole of the city proper. In addition to these reserves, the inhabitants of Sydney have the use of 552 acres, formerly reserved for the water supply of the city, but now known as the Centennial Park. This magnificent recreation ground has been cleared and planted, and is laid out with walks and drives, so that it is becoming a favourite resort of the citizens. The suburban municipalities are also well served, as they contain, including the Centennial Park, about 3,838 acres of public parks and reserves, or slightly over 4 per cent. of their aggregate area, dedicated to, and in some cases purchased for, the people by the Government.

In addition to these parks and reserves, there was dedicated to the people, in December, 1879, a large area of land, situated about 16 miles south of the metropolis, and accessible by railway. This estate, now known as the National Park, with the additions subsequently made in 1880 and 1883, contains a total area of 33,719 acres, surrounding the picturesque bay of Port Hacking, and extending in a southerly direction towards the mountainous district of Illawarra. It is covered with magnificent virgin forests; the scenery is charming, and its beauties attract thousands of visitors.

Another large tract of land, designated Ku-ring-gai Chase, was dedicated in December, 1894, for public use. The area of the Chase is 35,300 acres, and comprises portions of the parishes of Broken Bay, Cowan, Gordon, and South Colah. This park lies not more than 10 miles north of Sydney, and is accessible by railway at various points, or by water *via* the Hawkesbury River, several of whose creeks, notably Cowan Creek, flow through it.

In 1905 an area of 303 acres was proclaimed as a recreation ground at Kurnell, on the southern headland of Botany Bay, a spot famous as the landing-place of Captain Cook; and the Parramatta Park (252 acres) although outside the metropolis, might be mentioned on account of its historic interest.

In country districts, reserves have been proclaimed as temporary commons, whilst considerable areas have been from time to time dedicated as permanent commons attached to inland townships, which are otherwise well provided with parks and reserves within their boundaries.

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